US 20020198396A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2002/0198396 A1

Reed et al. (43) Pub. Date: Dec. 26, 2002

(54) OXIME-GROUP CONTAINING OESTRONE SULPHATASE INHIBITORS

(76) Inventors: Michael John Reed, London (GB); Barry Victor Lloyd Potter, Bath (GB)

Correspondence Address:
FROMMER LAWRENCE & HAUG
745 FIFTH AVENUE- 10TH FL.
NEW YORK, NY 10151 (US)

(*) Notice: This is a publication of a continued prosecution application (CPA) filed under 37 CFR 1.53(d).

(21) Appl. No.: 09/572,237

(22) Filed: May 17, 2000

(30) Foreign Application Priority Data

Dec. 3, 1998 (GB) PCT/GB98/03620
Dec. 4, 1997 (GB) 9725749.7

Publication Classification

(51) Int. Cl.[7] C07C 311/00; C07C 309/00; C07C 307/00; C07C 303/00

(52) U.S. Cl. 558/48

(57) ABSTRACT

A sulphamate compound suitable for use as an inhibitor of oestrone sulphatase (E.C.3.1.6.2) is described. The compound is a polycyclic compound comprising at least two ring components, wherein the polycyclic compound comprises at least one sulphamate group attached to at least one of the ring components, and wherein at least one oxime group is attached to or is part of at least one of the ring components.

In Vivo Inhibition (Rat Liver Sulphatase)

[0162] 99.2±0.42%. @ 2 mg/kg/dx5 ol, ORAL DOSE.

[0163] Examples 2 and 3are further referenced in Annex 1.

EXAMPLE 4

Measurement of Estrogenic Activity

[0164] Compounds according to the present invention such as Compound 2 (such as at levels of 0.1 mg/Kg/day for five days) are administered orally to rats with another group of animals receiving vehicle only (propylene glycol). At the end of the study uteri are obtained and weighed with the results being expressed as uterine weight/whole body weightx100.

[0165] The results show that administration of Compound 2 has an effect on uterine growth, showing that the compound is oestrogenic.

[0166] All publications mentioned in the above specification are herein incorporated by reference. Various modifications and variations of the described methods and system of the invention will be apparent to those skilled in the art without departing from the scope and spirit of the invention. Although the invention has been described in connection with specific preferred embodiments, it should be understood that the invention as claimed should not be unduly limited to such specific embodiments. Indeed, various modifications of the described modes for carrying out the invention which are obvious to those skilled in chemistry or related fields are intended to be within the scope of the following claims.

1. A sulphamate compound suitable for use as an inhibitor of oestrone sulphatase (E.C. 3.1.6.2), wherein the compound is a polycyclic compound comprising at least two ring components, wherein the polycyclic compound comprises at least one sulphamate group attached to at least one of the ring components, and wherein at least one oxime group is attached to or is part of at least one of the ring components.

2. A sulphamate compound according to claim 1 wherein at least one sulphamate group attached to at least one of the ring components, and wherein at least one oxime group is attached to or is part of at least one of the other ring components.

3. A sulphamate compound according to claim 2 wherein the sulphamate group is distanced away from the oxime group.

4. A sulphamate compound according to any one of claims 1 to 3 wherein the polycyclic compound has a steroidal structure.

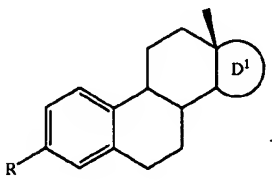
5. A sulphamate compound according to claim 4 wherein the oxime group is attached to or is part of a steroidal D ring.

6. A sulphamate compound according to any one of the preceding claims wherein the polycyclic compound has a steroidal structure and wherein the sulphamate group is attached to the A ring.

7. A sulphamate compound according to claim 6 wherein the sulphamate group is attached to the 3 position of the A ring.

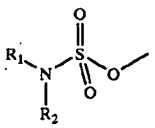
8. A sulphamate compound according to claim 7 wherein the compound has the formula:

(A)



wherein R is a sulphamate group and D^1 represents the combination of a ring component attached to which or a part of which is the oxime group.

9. A sulphamate compound according to any one of the preceding claims wherein the sulphamate group has the formula:



wherein each of R_1 and R_2 is independently selected from H or a hydrocarbyl group.

10. A sulphamate compound according to any one of the preceding claims wherein the compound is not hydrolysable by an enzyme having steroid sulphatase activity.

11. A sulphamate compound according to any one of the preceding claims wherein the compound is capable of exhibiting an oestrogenic effect.

12. A sulphamate compound according to any one of the preceding claims wherein the oxime group is an anti isomer.

13. A pharmaceutical composition comprising a sulphamate compound according to any one of the preceding claims admixed with a pharmaceutically acceptable diluent, carrier or excipient.

14. Use of a sulphamate compound according to any one of claims 1 to 12 in the manufacture of a medicament to inhibit steroid sulphatase activity.

15. Use of a sulphamate compound according to any one of claims 1 to 12 in the manufacture of an oestrogenic composition.

16. A method of treatment comprising treating a subject with a sulphamate compound according to any one preceding claims 1 to 12 or a composition according to claim 13 and in an amount such that at least some steroid sulphatase inhibition occurs within the subject.

17. A method of treatment comprising treating a subject with a sulphamate compound according to any one preceding claims 1 to 12 or a composition according to claim 13 and in an amount such that at least some oestrogenic activity occurs within the subject

18. A process for preparing a sulphamate compound according to any one of claims 1 to 12 comprising a sulphamylation step.

19. A sulphamate compound substantially as described herein.

* * * * *

US006642397B1

(12) **United States Patent**
Reed et al.

(10) **Patent No.: US 6,642,397 B1**
(45) **Date of Patent: Nov. 4, 2003**

(54) **STEROID SULPHATASE INHIBITORS**

(75) Inventors: **Michael John Reed**, London (GB); **Barry Victor Lloyd Potter**, Avon (GB)

(73) Assignee: **Sterix Limited**, Oxford (GB)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/579,163**

(22) Filed: **May 25, 2000**

Related U.S. Application Data

(60) Division of application No. 09/238,345, filed on Jan. 27, 1999, now Pat. No. 6,187,766, which is a division of application No. 09/111,927, filed on Jul. 8, 1998, now Pat. No. 6,011,024, which is a continuation-in-part of application No. 08/458,352, filed on Jun. 2, 1995, now Pat. No. 5,830,886, which is a division of application No. 08/196,192, filed as application No. PCT/GB92/01587 on Aug. 28, 1992, now Pat. No. 5,616,574, said application No. 09/111,927, is a continuation-in-part of application No. PCT/GB97/03352, filed on Dec. 4, 1997, and a continuation-in-part of application No. PCT/GB97/00600, filed on Mar. 4, 1997, and a continuation-in-part of application No. PCT/GB97/00444, filed on Feb. 17, 1997.

(30) **Foreign Application Priority Data**

Aug. 28, 1991 (GB) 9118478

(51) **Int. Cl.**[7] **C07J 1/00**
(52) **U.S. Cl.** **552/626**
(58) **Field of Search** 552/626

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,839,562	A	6/1958	Wegler et al.	
3,082,238	A	3/1963	Hirsch	
3,661,830	A	5/1972	Feit et al.	
3,950,380	A	4/1976	Feit et al.	
3,997,585	A	12/1976	Hirsch	
4,061,663	A	12/1977	Hirsch	
4,075,351	A	2/1978	Hirsch	
4,219,494	A	8/1980	Fischer et al.	
4,222,767	A	9/1980	Gates et al.	
4,513,006	A	4/1985	Maryanoff et al.	
4,582,916	A	4/1986	Maryanoff et al.	
4,591,601	A	5/1986	Maryanoff et al.	
4,792,569	A	12/1988	Maryanoff et al.	
4,824,475	A	4/1989	Markley et al.	
4,826,528	A	5/1989	Mengel et al.	
4,900,727	A	2/1990	Kattige et al.	
4,937,237	A	6/1990	Holt et al.	
5,025,031	A	6/1991	Lo et al.	
5,192,785	A	3/1993	Lo et al.	
5,194,446	A	3/1993	Lo et al.	
5,273,993	A	12/1993	Lo et al.	
5,281,587	A	1/1994	Reed	
5,344,827	A	9/1994	Reed	
5,567,831	A	10/1996	Li	
5,604,215	A	2/1997	Reed et al.	
5,616,574	A *	4/1997	Reed et al.	514/178
5,677,292	A	10/1997	Li et al.	
5,830,886	A	11/1998	Reed et al.	
5,880,115	A	3/1999	Li et al.	
6,159,960	A	12/2000	Reed et al.	

FOREIGN PATENT DOCUMENTS

AU	645975	2/1994
DD	114806	8/1975
DD	01148062	8/1975
DE	2417764 A1	4/1974
DE	1471174 A	7/1974
DE	2531445 A1	7/1975
DE	114806	8/1975
DE	1524727 A	11/1975
DE	24 18 217	11/1975
DE	2559210 A1	12/1975
DE	2025397 A	5/1979
DE	207447	2/1982
EP	0357061	8/1989
EP	0359036	8/1989
EP	0682020	8/1989

(List continued on next page.)

OTHER PUBLICATIONS

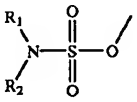
Maryanoff et al., J. Med. Chem, 30 (pp. 880–887) 1987.
Walsh et al., J. Med. Chem, 33 (pp. 2068–2070) 1990.
Dubois et al., J. Org. Chem. vol. 45, No. 26, (pp. 5372–5375) 1980.
Spillane and Burke, Synthesis, 12 (pp. 1021–1024), 1986.

(List continued on next page.)

Primary Examiner—Barbara P. Badio
(74) *Attorney, Agent, or Firm*—Frommer Lawrence & Haug; Thomas J. Kowalski

(57) **ABSTRACT**

A method of inhibiting steroid sulphatase activity in a subject in need of same is described. The method comprises administering to said subject a steroid sulphatase inhibiting amount of a ring system compound; which ring system compound comprises a ring to which is attached sulphamate group of the formula



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more hetero atoms or groups in the alkylene chain; and wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and if the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μM.

19 Claims, 20 Drawing Sheets

TABLE 1-continued

Inhibition of Oestrone Sulphatase Activity in MCF-7 Cells or Placental Microsomes by EMATE Analogues

Inhibitor	Concentration Tested (mM)	% Inhibition (Mean) MCF-7 Cells	Placental Microsomes
2-methoxy EMATE	0.1	96.0	—
	1	93.6	—
	10	96.2	99.0
	50	—	99.7
	100	—	99.7
2-nitro EMATE	0.05	—	44.5
	0.5	—	93.9
	5	—	99.0
	50	—	99.4
4-nitro EMATE	20	—	99.0
NOMATE	0.1	96.4	97.2
(17-deoxy EMATE)	1	99.1	99.5
	10	99.7	99.5
	25	99.7	99.7

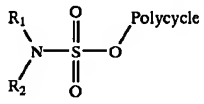
— = not tested

Irreversible time- and concentration-dependent inhibition is assumed for these compounds in keeping with established precedent (Biochemistry, 1995, 34, 11508–11).

Other modifications of the present invention will be apparent to those skilled in the art.

What is claimed is:

1. A purified compound of the formula



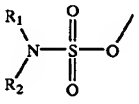
wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl; wherein at least one of R_1 and R_2 is H; and

wherein the group Polycycle is a ring system comprising at least four rings, at least three of which are fused;

wherein the compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2);

wherein if the sulphamate group on the compound were to be replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μM.

2. A purified compound comprising a steroidal ring structure and a sulphamate group of the formula



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl;

wherein at least one of R_1 and R_2 is H; and

wherein the compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2);

wherein if the sulphamate group on the compound were to be replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μM.

3. A purified compound according to claim 2, wherein the steroidal ring structure is a residue of a 3-sterol.

4. A purified compound according to claim 3, wherein the sterol is selected from the group consisting of oestrone, dehydroepiandrosterones, substituted oestrones and substituted dehydroepiandrosterones.

5. A purified compound according to claim 1 wherein R_1 and R_2 are independently selected from H, or a C_1–C_{10} alkyl; wherein at least one of R_1 and R_2 is H.

6. A purified compound according to claim 2 wherein R_1 and R_2 are independently selected from H, or a C_1–C_{10} alkyl; wherein at least one of R_1 and R_2 is H.

7. A purified compound according to claim 1 wherein R_1 and R_2 are independently selected from H, or a C_1–C_5 alkyl; wherein at least one of R_1 and R_2 is H.

8. A purified compound according to claim 2 wherein R_1 and R_2 are independently selected from H, or a C_1–C_5 alkyl; wherein at least one of R_1 and R_2 is H.

9. A purified compound according to claim 1 wherein R_1 and R_2 are independently selected from H or methyl; wherein at least one of R_1 and R_2 is H.

10. A purified compound according to claim 2 wherein R_1 and R_2 are independently selected from H or methyl; wherein at least one of R_1 and R_2 is H.

11. A purified compound according to claim 1 wherein R_1 is H and R_2 is H.

12. A purified compound according to claim 2 wherein R_1 is H and R_2 is H.

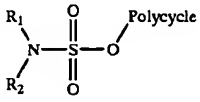
13. A purified compound according to claim 1 wherein the compound is any one of oestrone-3-sulphamate, oestrone-3-N-monomethylsulphamate.

14. A purified compound according to claim 3 wherein the compound is any one of oestrone-3-sulphamate, oestrone-3-N-monomethylsulphamate.

15. A purified compound according to claim 1 wherein the group Polycycle represents the residue of a sterol.

16. A purified compound according to claim 15 wherein the sterol is a 3-sterol.

17. A purified compound according to claim 2 wherein the compound is a compound of the formula



wherein the group Polycycle represents the residue of a 3-sterol, and wherein R_1 and R_2 are H.

18. A purified compound according to claim 1 or 2 wherein the compound is Oestrone 3-sulphamate.

19. A purified compound according to claim 1 or 2 wherein the compound is Oestrone-3-N-monomethylsulphamate.

* * * * *

US006187766B1

(12) **United States Patent**
Reed et al.

(10) **Patent No.: US 6,187,766 B1**
(45) **Date of Patent: Feb. 13, 2001**

(54) **STEROID SULPHATASE INHIBITORS**

(75) Inventors: **Michael John Reed**, London; **Barry Victor Potter**, Avon, both of (GB)

(73) Assignee: **Imperial College of Science Technology & Medicine**, London (GB)

(*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

(21) Appl. No.: **09/238,345**

(22) Filed: **Jan. 27, 1999**

Related U.S. Application Data

(60) Division of application No. 09/111,927, filed on Jul. 8, 1998, now Pat. No. 6,011,024, which is a continuation-in-part of application No. 08/458,352, filed on Jun. 2, 1995, now Pat. No. 5,830,886, which is a division of application No. 08/196,192, filed on Dec. 27, 1994, now Pat. No. 5,616,574, and a continuation-in-part of application No. PCT/GB97/00600, filed on Mar. 4, 1997, and a continuation-in-part of application No. PCT/GB97/00444, filed on Feb. 17, 1997, and a continuation-in-part of application No. PCT/GB97/03352, filed on Dec. 4, 1997.

(30) **Foreign Application Priority Data**

Aug. 28, 1991 (GB) 9118478

(51) **Int. Cl.**[7] **A61K 31/165**

(52) **U.S. Cl.** **514/178**; 514/603; 514/604; 514/601

(58) **Field of Search** 514/178, 601, 514/603, 604

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,792,569	12/1988	Maryanoff et al. .
4,937,237	6/1990	Holt et al. .
5,281,587	1/1994	Reed .
5,344,827	9/1994	Reed .
5,604,215	2/1997	Reed et al. .
5,616,574	4/1997	Reed et al. .
5,677,292	10/1997	Li et al. .
5,830,886	11/1998	Reed et al. .

FOREIGN PATENT DOCUMENTS

645975	2/1994	(AU) .
114806	8/1975	(DE) .
0 403 185	12/1990	(EP) .
1398026	6/1975	(GB) .
WO97/30041	8/1997	(WO) .
WO97/32872	9/1997	(WO) .
WO98/24802	6/1998	(WO) .

OTHER PUBLICATIONS

Stoler "Animal Experimental Contribution to the Development of Estrogenic Substances", Dissertation for award of Doctor of Science degree at the Mathematic–Naturwissenschaftlichh–Technischen faculty of Friedrich–Schiller–University Jena, Jul. 1989.

Clausen Erythrocytes as a drug carrier—Investigations with selected estrogens for loading following oral administration, Natural Science Faculty, Science Council, Martin–Luther Unversitat Halle–Wittenberg, Germany, Aug. 1989.

Schwarz et al., Pharmazie, vol. 30 (1975), pp. 17–21.

Howarth et al., J. Med. Chem., vol. 37 (1994), pp. 219–221.

Zeitschrift Fur Chemie, vol. 14, No. 1, 1974 pp. 15–16.

Townsley et al., Research Steroids, vol. 5 (1973), pp. 73–78.

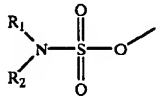
Primary Examiner—Rebecca Cook

(74) *Attorney, Agent, or Firm*—Frommer Lawrence & Haug LLP; Thomas J. Kowalski

(57) **ABSTRACT**

A method of inhibiting steroid sulphatase activity in a subject in need of same as described.

The method comprises administering to said subject a steroid sulphatase inhibiting amount of a ring system compound; which ring system compound comprises a ring to which is attached a sulphamate group of the formula



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, or together represent alkylene optionally containing one or more hetero atoms or groups in the alkylene chain; and wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (E.C.3.1.6.2); and if the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (E.C.3.1.6.2) at a pH 7.4 and 37° C. it would provide a K_m value of less than 50 μM.

3 Claims, 26 Drawing Sheets

TABLE 1-continued

Inhibition of Oestrone Sulphatase Activity in MCF-7 Cells or Placental Microsomes by EMATE Analogues

Inhibitor	Concentration Tested (mM)	% Inhibition (Mean) MCF-7 Cells	Placental Microsomes
	100	—	23.7
2,4-n-dipropyl EMATE	0.1	6.6	—
	1	10.6	—
2-allyl EMATE	0.01	23.2	—
	0.1	76.1	—
	1	94.2	45.6
	10	93.7	65.4
	25	—	75.3
	50	—	86.6
	100	—	89.6
4-allyl EMATE	1	—	29.1
(approx 75%)	10	—	54.2
	25	—	59.0
	50	—	65.1
	100	—	71.9
2,4-di-allyl EMATE	—	—	—
2-methoxy EMATE	0.1	96.0	—
	1	93.6	—
	10	96.2	99.0
	50	—	99.7
	100	—	99.7
2-nitro EMATE	0.05	—	44.5
	0.5	—	93.9
	5	—	99.0
	50	—	99.4
4-nitro EMATE	20	—	99.0
NOMATE	0.1	96.4	97.2
(17-deoxy EMATE)	1	99.1	99.5
	10	99.7	99.5
	25	99.7	99.7

— = not tested

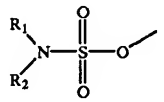
Irreversible time- and concentration-dependent inhibition is assumed for these compounds in keeping with established precedent (Biochemistry, 1995, 34, 11508–11).

Other modifications of the present invention will be apparent to those skilled in the art.

What is claimed is:

1. A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a ring system compound present in an amount to provide 100–500 mg of compound per unit dose;

wherein the ring system compound has a ring system and a sulphamate group of the formula:



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, and at least one of R_1 and R_2 is H;

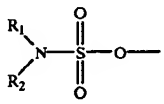
wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it provides a substrate for a steroid sulphatase enzyme (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (EC 3.1.6.2) at a pH of 7.4 and 37° C. it provides a K_m value of less than 50 μM.

2. A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a ring system compound present in a pharmaceutically effective amount;

wherein the ring system compound has a ring system and a sulphamate group of the formula:



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, and at least one of R_1 and R_2 is II;

wherein the ring system has at least three rings, wherein at least two of those rings are fused;

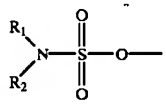
wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it provides a substrate for a steroid sulphatase enzyme (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (EC 3.1.6.2) at a pH of 7.4 and 37° C. it provides a K_m value of less than 50 μM.

3. A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and a ring system compound present in a pharmaceutically effective amount;

wherein the ring system compound has a steroidal ring structure and a sulphamate group of the formula:



wherein each of R_1 and R_2 is independently selected from H, alkyl, alkenyl, cycloalkyl and aryl, and at least one of R_1 and R_2 is H;

wherein said compound is an inhibitor of an enzyme having steroid sulphatase activity (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound it provides a substrate for a steroid sulphatase enzyme (EC 3.1.6.2); and

wherein when the sulphamate group of said compound is replaced with a sulphate group to form a sulphate compound and incubated with a steroid sulphatase enzyme (EC 3.1.6.2) at a pH of 7.4 and 37° C. it provides a K_m value of less than 50 μM.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6,187,766 B1
DATED : February 13, 2001
INVENTOR(S) : Reed et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

ON THE COVER PAGE:
Under [73] please change the Assignee from "Imperial College of Science Technology & Medicine, London, United Kingdom" to --Sterix Limited, Oxford, United Kingdom--.

Under [56], References Cited OTHER PUBLICATIONS:
Line 1, change "Stoler" to--Stolzner-- and
Line 6, change "Clausen" to --Claussen--. ON THE COVER PAGE:
Under [73] please change the Assignee from "Imperial College of Science Technology & Medicine, London, United Kingdom" to --Sterix Limited, Oxford, United Kingdom--.

Under [56], References Cited OTHER PUBLICATIONS:
Line 1, change "Stoler" to--Stolzner-- and
Line 6, change "Clausen" to --Claussen--.

Signed and Sealed this

Twelfth Day of June, 2001

Attest:

Nicholas P. Godici

Attesting Officer

NICHOLAS P. GODICI
Acting Director of the United States Patent and Trademark Office

US005616574A

United States Patent [19]

Reed et al.

[11] **Patent Number: 5,616,574**

[45] **Date of Patent: Apr. 1, 1997**

[54] **STEROID SULPHATASE INHIBITORS**

[75] Inventors: **Michael J. Reed**, London; **Barry V. L. Potter**, Bathford, both of United Kingdom

[73] Assignee: **Imperial College of Science, Technology and Medicine**, United Kingdom

[21] Appl. No.: **196,192**

[22] PCT Filed: **Aug. 28, 1992**

[86] PCT No.: **PCT/GB92/01587**

§ 371 Date: **Dec. 27, 1994**

§ 102(e) Date: **Dec. 27, 1994**

[87] PCT Pub. No.: **WO93/05064**

PCT Pub. Date: **Mar. 18, 1993**

[30] **Foreign Application Priority Data**

Aug. 29, 1991 [GB] United Kingdom 9118478

[51] **Int. Cl.**[6] **A61K 31/165**; C07J 1/00

[52] **U.S. Cl.** **514/178**; 552/626

[58] **Field of Search** 552/626; 514/178, 514/171

[56] **References Cited**

FOREIGN PATENT DOCUMENTS

1398026 6/1975 United Kingdom .

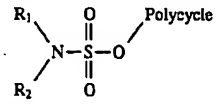
OTHER PUBLICATIONS

Zeitschrift fur Chemie, Schwarz et al, 14 (1) 1974 pp. 15–16.

Primary Examiner—Rebecca Cook
Attorney, Agent, or Firm—Nixon & Vanderhye

[57] **ABSTRACT**

Steroid sulphatase inhibitors and pharmaceutical compositions containing them for use in the treatment of oestrone dependent tumors, especially breast cancer. The steroid sulphatase are sulphamate esters of formula (I)



(I)

where R_1 and R_2 are each H, alkyl, alkenyl, cycloalkyl or aryl, or together represent an alkylene group optionally containing a heteroatom e.g. —O— or —NH—; and —O— polycycle represents the residue of a polycyclic alcohol such as a sterol, preferably a 3-sterol.

12 Claims, 5 Drawing Sheets

TABLE V

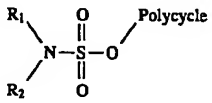
Steroid Sulphatase Activity in Liver Microsome Preparations from Rats treated with subcutaneous Oestrone-3-sulphamate

Treatment Group	Assay Substrate	Steroid Sulphatase Activity ¶ (nmol/30 min/200 μg protein)	% reduction over control
control (vehicle)	E_1-S	20.95 ± 0.2	—
E_1-SO_3NH_2	E_1-S	0.34 ± 0.1***	98.4%
control (E_1-S)	E_1-S	20.6 ± 0.4	—
E_1-S + E_1-SO_3NH_2	E_1-S	0.21 ± 0.03***	99.0%
control (vehicle)	DHA-S	1.73 ± 0.4	—
E_1-SO_2NH_3	DHA-S	0.1 ± 0.01***	94.2%
control (E_1-S)	DHA-S	1.71 ± 0.1	—
E_1-S + E_1-SO_3NH_2	DHA-S	0.09 ± 0.01***	94.7%

¶ mean ± 1 S.D. n = 3
***p ≦ 0.001
E_1-S = oestrone-3-sulphamate
DHA-S = dehydroepiandrosterone-3-sulphate
E_1-SO_3NH_2 = oestrone-3-N,N-dimethylsulphamate

We claim:

1. A compound of the formula



where R_1 and R_2 are each independently selected from H and methyl, provided that at least one of R_1 and R_2 is hydrogen; and

the group —O— polycycle is a 3-sterol the sulfate of which is hydrolyzable by an enzyme having steroid sulphatase (E.C. 3.1.6.2) activity;

or a pharmaceutically acceptable salt thereof.

2. The compound according to claim 1, wherein the sterol is selected from the group consisting of oestrone, dehydroepiandrosterone, a substituted oestrone, a substituted dehydroepiandrosterone, oestradiol, substituted oestradiol, ostriol and substituted oestriol.

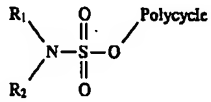
3. The compound according to claim 2, wherein R_1 is hydrogen and R_2 is methyl.

4. The compound according to claim 1, wherein R_1 and R_2 are both hydrogen.

5. The compound according to claim 1, wherein the compound is oestrone-3-sulphamate.

6. The compound according to claim 1, wherein the compound is oestrone-3-N-monomethylsulphamate.

7. A pharmaceutical composition comprising in admixture with a pharmaceutically acceptable diluent or carrier a compound of the formula



where R_1 and R_2 are each independently selected from H and methyl, provided that at least one of R_1 and R_2 is hydrogen; and

the group —O— polycycle is a 3-sterol the sulfate of which is hydrolyzable by an enzyme having steroid sulfatase (E.C. 3.1.6.2) activity;

or a pharmaceutically acceptable salt thereof.

8. The composition according to claim 7, wherein the sterol is selected from the group consisting of oestrone, dehydroepiandrosterone, a substituted oestrone, a substituted dehydroepiandrosterone, oestradiol, substituted oestradiol, ostriol and substituted oestriol.

9. The composition according to claim 8, wherein R_1 is hydrogen and R_2 is methyl.

10. The composition according to claim 7, wherein R_1 and R_2 are both hydrogen.

11. The composition according to claim 7, wherein the compound is oestrone-3-sulfamate.

12. The composition according to claim 7, wherein the compound is oestrone-3-N-monomethylsulfamate.

* * * * *

```
=> d his

     (FILE 'HOME' ENTERED AT 10:49:06 ON 12 NOV 2003)

     FILE 'REGISTRY' ENTERED AT 10:49:10 ON 12 NOV 2003
L1             STRUCTURE UPLOADED
L2              50 S L1
L3            2415 S L1 FULL
L4             STRUCTURE UPLOADED
L5             640 S L4 FULL SUB=L3

     FILE 'CAPLUS' ENTERED AT 10:52:45 ON 12 NOV 2003
L6             147 S L5
L7               1 S L6 NOT PY>=1992
L8               1 S L6 NOT PY>=1991

=> d ibib ab fqhit 1-50
```

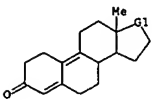
L10 ANSWER 1 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 139:22385 MARPAT
TITLE: Phosphoric acid isomerization of a 5(10),9(11)-diene steroid to the corresponding 4,9-diene steroid
INVENTOR(S): Vaidyanathan, Rajappa
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003109728	A1	20030612	US 2002-315273	20021210
WO 2003053990	A1	20030703	WO 2002-US39357	20021210

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-339620P 20011212
OTHER SOURCE(S): CASREACT 139:22385
AB The .DELTA.4,9-steroids I (RR1 = O; R = .alpha.- or .beta.-OH, silyl protected OH, acyloxy; R1 = H, alkyl, Ph) were prepd. by reaction of .DELTA.5(10),9(11)-diene steroids II with a phosphorous contg. acid. Thus, 17.beta.-hydroxyandrosta-5(10),9(11)-dien-3-one was treated with phosphoric acid at 20-25.degree. for 2 h followed by cooling to 10.degree. and addn. of DMF and water to give 17.beta.-hydroxyandrosta-4,9-dien-3-one as ppt.

MSTR 1



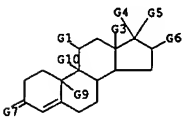
G1 = C(O)
MPL: claim 1

L10 ANSWER 2 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 138:390583 MARPAT
TITLE: Skin-lightening agents containing substances which reduce tyrosinase and cosmetics containing the agents
INVENTOR(S): Sudo, Shigeru
PATENT ASSIGNEE(S): Mikimoto Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003155222	A2	20030527	JP 2001-351904	20011116

PRIORITY APPLN. INFO.: JP 2001-351904 20011116
AB Skin-lightening agents contain substances which reduce amt. of tyrosinase of human melanocytes. The substances may be steroids which show antagonistic activity on progesterone/glucocorticoid receptors and may be represented by I [R1 = ethynyl, furyl, C3-6 cycloalkyl, Ph, naphthyl, C6H4Ph, C.ltoreq.6 alkyl which may have several unsatd. bond, alkenyl; R2 = Me, Et; R3 = H, (un)substituted alkyl, alkenyl, alkynyl, hydroxyacetyl, carboxyalkoxy, hydroxyalkyl; R4 = H, OH, C.ltoreq.12 alkyl, alkenyl, alkynyl; R5 = .alpha.- or .beta.-H, Me; X = O, syn- or anti-hydroxyimino, C1-45 alkoxyimino; A and B are bonded together to form .alpha.-epoxy group or optional double bond]. Skin-lightening cosmetics contg. the agents are also claimed. Mifepristone significantly decreased amt. of tyrosinase in normal human epidermal melanocytes and the action was effective in the presence of forskolin or .alpha.MSH. A cream contg. mifepristone was also formulated.

MSTR 1



MPL: claim 3

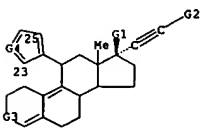
L10 ANSWER 3 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 138:379257 MARPAT
TITLE: Methods for the treatment of major depressive disorder using glucocorticoid receptor antagonists
INVENTOR(S): Peeters, Bernardus Wijnand Mathys Marie; Sennef, Cornelis
PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.
SOURCE: PCT Int. Appl., 14 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003043640	A2	20030530	WO 2002-EP12854	20021118

W: AE, AG, AL, AU, BA, BB, BR, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, GD, GE, HR, HU, ID, IL, IN, IS, JP, KE, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, RO, RU, SG, SI, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2001-204518 20011123
AB The invention provides a method for the treatment of a patient suffering from major depressive disorder by administering to the patient an effective amt. of a glucocorticoid receptor antagonist and to methods for establishing the optimal treatment regimen.

MSTR 1



G3 = CHOH
MPL: claim 7

L10 ANSWER 4 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 138:304438 MARPAT
TITLE: Preparation of 8.beta.-substituted 11.beta.-(para-substituted)aryl-estra-2,3,5(10)-triene derivatives as contraceptives and antiproliferatives
INVENTOR(S): Braeuer, Nico; Peters, Olaf; Hillisch, Alexander; Hegele-hartung, Christa; Muhn, Peter
PATENT ASSIGNEE(S): Schering AG, Germany
SOURCE: Ger. Offen., 18 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10151114	A1	20030417	DE 2001-10151114	20011015
WO 2003033516	A1	20030424	WO 2002-EP11533	20021015

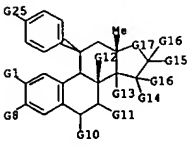
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003171345	A1	20030911	US 2002-270077	20021015

PRIORITY APPLN. INFO.: DE 2001-10151114 20011015
US 2001-330728P 20011029
AB The present invention concerns 8.beta.-substituted 11.beta.-(para-substituted)phenyl estra-1,3,5(10)-trienes, e.g., I [R2 = H, I, Br, Cl, F, OH, (un)satd. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-aryl, O-heteroaryl, O-aralkyl, etc.; R6, R7 = H; R6' = H, OH, (un)satd. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-aryl, O-heteroaryl, O-aralkyl, etc.; R7' = H, halogen, OH, (un)satd. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-acyl, O-heteroaryl, O-aralkyl, etc.; R8 = straight or branched-chain, optionally partly or completely halogenated C1-5-alkyl, alkenyl, ethynyl, prop-1-ynyl; R14 = H; R14R15 = bond; R15 = H; R15R16 = bond; R15' , R16' = H, halogen, OH, (un)satd. O-(C1-6-alkyl) O-(C1-6-acyl), O2CPh, OCF3, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, etc.; R3 = OH, OSO2NH2, OSO2NH-alkyl, OSO2N(alkyl)2, O-aryl, O-heteroaryl, O-aralkyl, etc.; R16 = H; R17, R17' = H, H and halogen, H and O2CPh, H and OSO2OH deriv.; R17R17' = :CH-halogen, O, etc.; X = O, S, bond; Y = NH2, NH(C1-10-alkyl), N(C1-10-alkyl)2, NH(C3-7-alkyl), N(C3-7-cycloalkyl)2; Z = (CH2)n; n = 1 - 12, etc.] and their pharmaceutically acceptable salts. Thus, estratrienediol II was prepd. from 3-methoxyestra-1,3,5(10)-trienone III via enol trifluoromethanesulfonylation, coupling reaction with 4-PhCH2OC6H4SnBu3, hydrogenolytic debenzylation, etherification with N-(2-hydroxyethyl)piperidine, and acid-catalyzed hydrolysis. The new compds. are useful for the contraception with men and women, without affecting other estrogenic-sensitive organs like the uterus or the liver. They are suitable also for the treatment of benign or malicious proliferative illnesses of the ovary, like ovarian carcinomas and Granulosa cell tumors.

L10 ANSWER 4 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MSTR 1



G17 = 88

MPL: claim 1
NTE: and pharmacologically acceptable salts with acids

L10 ANSWER 5 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 138:248958 MARPAT
TITLE: Methods and formulations of steroid compounds to modulate the immune and cellular response in various pathological states.
INVENTOR(S): Ahlem, Clarence N.; Frincke, James M.; Dos Anjos De Carvalho, Luis Daniel; Heggie, William; Prendergast, Patrick T.; Reading, Christopher L.; Thadikonda, Krupakar Paul; Vernon, Russell N.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 161 pp., Cont.-in-part of U.S. Ser. No. 675,470.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

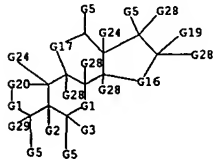
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003060425	A1	20030327	US 2001-820483	20010329
ZA 2001003845	A	20020513	ZA 2001-3845	20010511
ZA 2001003852	A	20020611	ZA 2001-3852	20010511
WO 2002069977	A1	20020912	WO 2002-US6708	20020301
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003083231	A1	20030501	US 2002-87929	20020301

PRIORITY APPLN. INFO.:
US 1998-109923P 19981124
US 1998-109924P 19981124
US 1998-110127P 19981127
US 1998-112206P 19981215
US 1999-124087P 19990311
US 1999-126056P 19990323
US 1999-137745P 19990603
US 1999-140028P 19990616
US 1999-145823P 19990727
US 1999-414905 19991008
US 1999-161453P 19991025
US 1999-449004 19991124
US 1999-449042 19991124
US 1999-449184 19991124
US 1999-461026 19991215
US 2000-535675 20000323
US 2000-586672 20000601
US 2000-586673 20000601
US 2000-675470 20000928
US 2000-257071P 20001220
US 2001-272624P 20010301
US 2001-820483 20010329
US 2001-323016P 20010910

L10 ANSWER 5 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
US 2001-328738P 20011011
US 2001-340054P 20011101
US 2001-338015P 20011108
US 2001-340045P 20011130
US 2001-343523P 20011220

AB The invention provides compns. comprised of steroids, e.g., 16.alpha.-bromo-3.beta.-hydroxy-5.alpha.-androstan-17-one hemihydrate and one or more excipients, including compns. that comprise a liq. formulation comprising less than about 3% vol./vol. water. The compns. are useful to make improved pharmaceutical formulations. The invention also provides methods of intermittent dosing of steroid compds. such as analogs of 16.alpha.-bromo-3.beta.-hydroxy-5.alpha.-androstan-17-one and compns. useful in such dosing regimens. The invention further provides compns. and methods to inhibit pathogen replication, ameliorate symptoms assocd. with immune dysregulation and to modulate immune responses in a subject using the compds. The invention also provides methods to make and use these immunomodulatory compns. and formulations.

MSTR 18



G1 = 199

G16 = CH2 (SO)
G17 = CH2 (SO)
G20 = CH2CH2 (SO)
MPL: claim 1
NTE: additional ring, double bond, oxo and thioxo formation also claimed
NTE: or pharmaceutically acceptable salts, esters, amides or prodrugs

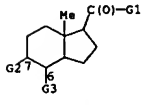
L10 ANSWER 6 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 138:170081 MARPAT
TITLE: Preparation of optically active pyridyl alcohols via optical resolution of diastereomers
INVENTOR(S): Matsuyoshi, Masato; Nojima, Masatomo; Kita, Yasuyuki
PATENT ASSIGNEE(S): Daiso Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003048896	A2	20030221	JP 2001-233119	20010801

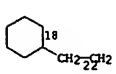
PRIORITY APPLN. INFO.:
JP 2001-233119 20010801
OTHER SOURCE(S): CASREACT 138:170081

AB Optically active pyridyl alcs. trans-I [R1 = (un)substituted lower alkyl, halo; n = 3-5] are prepd. by esterification of (.+-.)-trans-I with optically active carboxylic acids cis-II [X = OH, alkoxy, halo; R2, R3 = (un)substituted alkyl; R2R3 may form ring], dissolving diastereomers into water-insol. org. solvents, washing with acidic aq. solns. for sepn. of diastereomers into org. and aq. layers, and redn. or hydrolysis of esters. (.+-.)-Trans I (R1 = H, n = 4) was esterified with 3.beta.-acetoxy-.DELTA.5-etiocholenic acid chloride to give 90% diastereomer mixt., which was dissolved into Et2O, washed with aq. HCl, and reduced by LiAlH4 to give 68% (+)-trans-I (R1 = H, n = 4) with 77% ee from the org. layer and 90% (-)-trans-I (R1 = H, n = 4) with 93% ee from the aq. layer.

MSTR 2



G2 +G3 = 18-7 22-6



MPL: claim 1
NTE: also incorporates claim 10

L10 ANSWER 7 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 137:370278 MARPAT
TITLE: Preparation of substituted pregna-1,3,5(10)-triene derivatives for pharmaceutical use
INVENTOR(S): Hesse, Robert Henry; Setty, Sundara Katugam Srinivasasetty; Pechet, Maurice Murdoch; Gile, Michael
PATENT ASSIGNEE(S): Marsden, John Christopher, UK; Research Institute for Medicine and Chemistry Inc.
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

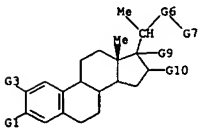
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092100	A1	20021121	WO 2002-GB2210	20020513

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-290013P 20010511

AB Pregna-1,3,5(10)-triene derivs., such as I [R1 = H, hydroxy protecting group; R2 = OH, CHO, alkoxy, alkenyl, alkyl, etc.; R3 = .alpha.-, .beta.-Me; X = C1-3 alkylene group, bond; Y = C(R4)(R5)NR6R7; R4, R5 = H, alkyl, alkenyl and alkynyl groups, such that the total carbon content of R4 and R5 does not exceed three atoms; R6 = H, aliph. or araliph. org. group, acyl, etc.; C16-C17 = satd., unsatd.], were prepd. for a variety of therapeutic uses, such as modulating cell activity, including antiproliferative and antiangiogenic effects. Thus, pregna-1,3,5(10)-triene derivs. II (Y = NH2, NHCOMe) were prepd. via a multistep synthetic series starting from 2-methoxy-3-[[tris(1-methylethyl)silyl]oxy]-estra-1,3,5(10)-trien-17-one and ethyltriphenylphosphonium bromide. Pharmaceutical compns. of the prepd. compds. were discussed, but specific pharmaceutical activity testing data was not presented.

MSTR 1



L10 ANSWER 7 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
MPL: claim 1
NTE: total carbon carbon content of G8 does not exceed three atoms
NTE: substitution is restricted

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 8 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 137:363699 MARPAT
TITLE: Preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection
INVENTOR(S): Cook, Christian John; Wu, Yinqiu; Mitchell, John Stanton
PATENT ASSIGNEE(S): The Horticulture and Food Research Institute of New Zealand Limited, N. Z.
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

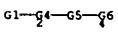
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092631	A1	20021121	WO 2002-NZ92	20020514

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

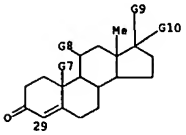
PRIORITY APPLN. INFO.: NZ 2001-511705 20010514

AB A hapten-linker-large group conjugate for use in a rapid assay, wherein the assay is kinetic-based not approaching equil., the hapten-linker-large group conjugate being of the general formula: X - W - Y - Z wherein:X is a hapten; W is an optional thioether or ether group; Y is a linker of 10 or more atoms in length; and Z is a large group of sufficient size to provide steric hindrance with respect to the binding of X to a ligand in the absence of Y. Also provided are processes for the prodn. of the conjugates, assay methods and kits.

MSTR 1



G1 = 29



MPL: claim 1

L10 ANSWER 8 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 137:353214 MARPAT
TITLE: Preparation of 17.alpha.-(cycloalkylcarbonyloxy)androstane-17.beta.-carbothioate derivatives as anti-inflammatory agents
INVENTOR(S): Biggadike, Keith; Jones, Paul; Payne, Jeremy John
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002088167	A1	20021107	WO 2002-GB1971	20020430

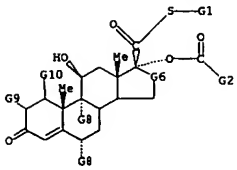
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:		
	GB 2001-10578	20010430
	GB 2001-27988	20011122
	GB 2002-2442	20020202
	GB 2002-2637	20020205

AB The title compds. I [R1 = C1-6 alkyl, C1-6 haloalkyl; R2 = C3-8 cycloalkyl, C3-8 cycloalkenyl; R3 = H, Me (which may be in either the .alpha. or .beta. configuration), methylene; R4, R5 = H, halogen; dashed bond = single or double bond], and solvates thereof, were prepd. for treatment of inflammatory and allergic conditions. Thus, 6.alpha.,9.alpha.-difluoro-11.beta.,17.alpha.-dihydroxy-16.alpha.-methyl-3-oxo-androsta-1,4-diene-17.beta.-carbothioic acid was treated with cyclobutanecarbonyl chloride and the product was treated with BrCH2F to afford 6.alpha.,9.alpha.-difluoro-11.beta.-hydroxy-16.alpha.-methyl-7.alpha.-(cyclobutanecarbonyl)oxy-3-oxo-androsta-1,4-diene-17.beta.-carbothioic acid S-fluoromethyl ester (II). II showed an EC50 value of <2 nM in a functional in vitro assay of glucocorticoid agonist activity.

MSTR 1

L10 ANSWER 9 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G6 = 34

HC—G7
34

MPL: claim 1
NTE: and solvates

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 10 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 136:6179 MARPAT
TITLE: Preparation of triterpenoid derivatives in the treatment of a proliferative disorder
INVENTOR(S): Majduch, Marian; Sarek, Jan
PATENT ASSIGNEE(S): Univerzita Palackeho v Olomouci, Czech Rep.; Univerzita Karlova v Praze; Cyclacel Limited
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001090046	A1	20011129	WO 2001-GB2309	20010523

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

GB 2362649	A1	20011128	GB 2000-12823 20000525
EP 1292562	A1	20030319	EP 2001-936618 20010523

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

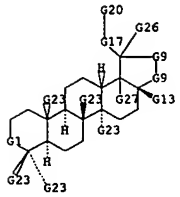
PRIORITY APPLN. INFO.:		
	GB 2000-12528	20000523
	GB 2000-12823	20000525
	WO 2001-GB2309	20010523

OTHER SOURCE(S): CASREACT 136:6179

AB Triterpenoid derivs., such as I [X1 = CHOC(O)OR11, CHOC(O)OR1a, CHOC(O)OR12, CHOCOY-Hal; X4, X5 = CH2, CH-Hal, CO, CHOR1b, CHOCOR1b, CHOC(O)OR11; R1-5 = H, alkyl; R7 = CO-Hal, C(O)OC(O)R1c, COOYOCOR1c, CH2OC(O)OR11; R9 = R1d, OR1d, CH2-Hal, CH2OR1d, CH2OC(O)OR11; R10 = R1e, CH=NOR1e; CN, COOR1e, CH2-Hal, CH2OR1e, etc.; R11 = hydroxyalkyl, ether, cyclic ether; R12 = alkyl, haloalkyl; dashed line = double bond or single bond; Y = (CH2)n; n = 0-5; R1a-1e = same or different groups of R1; Hal = Cl, Br, I, F], or pharmaceutically acceptable salt, were prepd. for treating a patient suffering from leukemia, cancer or other proliferative disorder. Thus, triterpenoid deriv. II was prepd. via acid hydrolysis of 17.beta.-methoxycarbonyl-28-norlup-20(29)-en-3.beta.-yl[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl] carbonate (obtained by the reaction of Me betulinate and solketal formate). II showed TCS50 = 13.mu.M against human T-lymphoblastic leukemia CEM cell line.

MSTR 1

L10 ANSWER 10 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G9 = 35

HC—G10
35

MPL: claim 1
NTE: substitution is restricted
NTE: or pharmaceutically acceptable salts

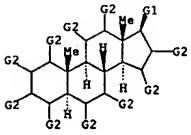
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 135:318612 MARPAT
TITLE: A process for the preparation of 7.alpha.-hydroxy 3-aminosubstituted sterols using intermediates with an unprotected 7.alpha.-hydroxy group
INVENTOR(S): Kinney, William A.; Zhang, Xuehai; Michalak, Ronald
PATENT ASSIGNEE(S): Genaera Corporation, USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001079255	A1	20011025	WO 2001-US12004	20010412
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1274718	A1	20030115	EP 2001-926924	20010412
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003531148	T2	20031021	JP 2001-576852	20010412
US 2003171576	A1	20030911	US 2002-268660	20021011
PRIORITY APPLN. INFO.:			US 2000-196646P	20000412
			WO 2001-US12004	20010412

OTHER SOURCE(S): CASREACT 135:318612
AB An efficient method for the synthesis of aminosterol compds. such as squalamine and compd. 1436 is described. A method of the invention provides for regioselective oxidn. and regioselective sulfonation of a fused ring system. The fused ring base can be, for example, a steroid ring base. The aminosterol compds. are effective as, among others, antibiotics, antiangiogenic agents and NHE3 inhibitors. Thus, squalamine and compd. 1436 intermediate I (R = SO3H) was prepd. by the regioselective oxidn. of II (R = CH2OH) with NaOCl and TEMPO to give II (R = CHO), and regioselective sulfonation of I (R = H).

MSTR 1



L10 ANSWER 11 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MPL: claim 2

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

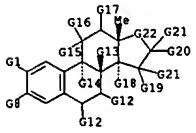
L10 ANSWER 12 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 135:318608 MARPAT
TITLE: Preparation of 8.beta.-hydrocarbyl-substituted estratrienes for use as selective estrogens
INVENTOR(S): Peters, Olaf; Hillisch, Alexander; Thieme, Ina; Elger, Walter; Hegele-Hartung, Christa; Kollenkirchen, Uwe; Fritzemeier, Karl-Heinrich; Patchev, Vladimir
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077139	A1	20011018	WO 2001-EP4290	20010412
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10019167	A1	20011018	DE 2000-10019167	20000412
EP 1272504	A1	20030108	EP 2001-931609	20010412
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001009983	A	20030225	BR 2001-9983	20010412
BG 107173	A	20030530	BG 2002-107173	20021008
NO 2002004908	A	20021113	NO 2002-4908	20021011
US 2003176405	A1	20030918	US 2003-257288	20030401
PRIORITY APPLN. INFO.:			DE 2000-10019167	20000412
			US 2000-207370P	20000526
			WO 2001-EP4290	20010412

AB The invention relates to novel 8.beta.-substituted estratrienes I [R2 = H, halogen, straight or branched (un)satd. C1-6-alkyl, alkoxy, CF3, sulfonamide; R3 = alkoxy, sulfonamide, acyloxy; R6, R7 = H; R6R7 = bond; R6', R7' = H, halogen, alkoxy, sulfonamide; R8 = a straight- or branched-chained, optionally partially or completely halogenated C1-5-alkyl, alkenyl, ethynyl, prop-1-ynyl; R9 = H, straight or branched (un)satd. C1-5-alkyl; R9R11 = bond; R11 = H; R11R12 = bond; R11' = H, halogen, a straight- or branched-chained, optionally partially or completely fluoro- or chloro-C1-4-alkyl, alkoxy, alkylthio; R12 = H; R14 = H; R14R15 = bond; R15 = H; R15R16 = bond; R15', R16' = H, halogen, alkoxy, sulfonamid; R16 = H; R17, R17' = H, H and halogen, H and OCH2Ph, H and sulfonamide, alkyl and acyl or acyloxy, alkoxy and alkyl, alkoxy and acyloxy; R17R17' = :CH2, :CR24R25;R24, R25 = halogen; R24R25 = O]. Thus, vinylestradiol II was prepd. from estra-1,3,5(10)-tetraenone III in 8 steps. The inventive estratrienes are used as pharmaceutically active substances that have in vitro a higher affinity to estrogen receptor prepns. of rat prostate than to estrogen receptor prepns. of rat uterus and which in vivo preferably have a preferential effect on bone material as compared to uterus and/or a pronounced effect with respect to the stimulation of the expression of 5HT2a receptor and transporter. II showed a relative binding affinity for the estrogen receptor of 1 in rat uterus and of 83 in rat prostate. The invention further relates to the prodn. of these novel compds., to their use in therapy and to the

L10 ANSWER 12 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
pharmaceutical forms of administration that contain said novel compds. The invention further describes the use of said compds. for treating estrogen-deficiency related diseases and conditions and to the use of an 8.beta.-substituted estratriene structural part in the overall structures of compds. that are characterized by a dissocn. in favor of their estrogen effect on the bone as compared to the uterus.

MSTR 1A



G22 = 74

MPL: claim 1

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 13 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 135:227248 MARPAT
TITLE: Preparation of amino acid derivatives as HIV aspartyl protease inhibitors
INVENTOR(S): Stranix, Brent Richard; Sauve, Gilles; Bouzide, Abderrahim; Sevigny, Guy; Yelle, Jocelyn
PATENT ASSIGNEE(S): Pharmacor Inc., Can.
SOURCE: PCT Int. Appl., 158 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

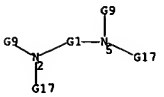
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001068593	A2	20010920	WO 2001-CA296	20010307
WO 2001068593	A3	20020228		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6455587	B1	20020924	US 2000-526209	20000315
EP 1263716	A2	20021211	EP 2001-914865	20010307
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-526209 20000315
WO 2001-CA296 20010307

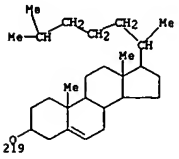
AB The invention relates to a class of amino acid derivs. I [W = (CH2)n or CH2-XX-CH2CH2, where n = 1-5, XX = O, NR5 (R5 = H, alkyl), S, SO, SO2; Cx = CO2M (M is an alkali or alk. earth metal), CO2R5, CH2OH, CONR5R6 (R6 = H, alkyl), CONHOH, Fmoc-Lys-NHCO (Fmoc = 9-fluorenylmethoxycarbonyl), benzyloxycarbonyl or tetrazolyl; R1, R3 = H, Me3O2C, alkyl, cycloalkylalkyl, arylalkyl or heterocyclylalkyl having a defined structure; R2, R4 = H, CHO, CF3, acyl or sulfonyl groups (e.g., 4-PhCH2CH2CONHC6H4SO2, camphor-10-CH2SO2, naphthyl-SO2, fluorenyl-SO2, and quinoline-SO2), arylalkyl of defined structure] or pharmaceutically acceptable ammonium salts having HIV aspartyl protease inhibitory properties. Thus, N.alpha.-isobutyl-N.alpha.-tosyl-N.epsilon.-Fmoc-L-lysine (II) was prepd. from N.epsilon.-benzyloxycarbonyl-L-lysine benzyl ester by N-alkylation using isobutyraldehyde, N-tosylation, hydrogenolysis, and protection with Fmoc-O-succinimide. Compd. II showed Ki = 4.3 nM for inhibition of HIV aspartyl protease.

MSTR 1

L10 ANSWER 13 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G18 = 219



MPL: claim 1
NTE: and pharmaceutically acceptable ammonium salts

L10 ANSWER 14 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 135:147769 MARPAT
TITLE: Method of increasing alertness by administration of a vomeropherin, and vomeropherin-emitting alarm devices
INVENTOR(S): Berliner, David L.; Monti, Louis; Jennings-White, Clive L.
PATENT ASSIGNEE(S): Pherin Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001056577	A1	20010809	WO 2001-US3572	20010202
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6544971	B1	20030408	US 2000-498830	20000204
EP 1251856	A1	20021030	EP 2001-905412	20010202
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003523329	T2	20030805	JP 2001-556476	20010202

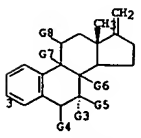
PRIORITY APPLN. INFO.: US 2000-498830 20000204
WO 2001-US3572 20010202

AB A method of increasing alertness in an individual by administering an effective amt. of an alertness-increasing vomeropherin to the individual; and an alarm device that, when activated, emits an alertness-increasing vomeropherin. The method and device are esp. useful in increasing alertness in individuals who are not readily responsive to usual external stimuli.

MSTR 1

G1—G2

G2 = 3



MPL: claim 1

L10 ANSWER 14 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
NTE: or salts

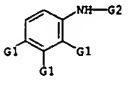
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 15 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 135:66070 MARPAT
TITLE: Preparation and use of a composition based on lipid lamellar vesicles incorporating an aminophenol derivative
INVENTOR(S): Chevalier, Veronique; Simonnet, Jean Thierry; Le Verge, Danielle
PATENT ASSIGNEE(S): L'oreal, Fr.
SOURCE: Fr. Demande, 27 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

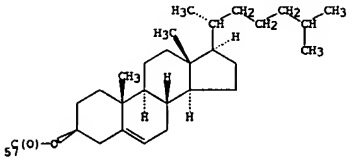
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2796838	A1	20010202	FR 1999-9663	19990726
FR 2796838	B1	20030523		
PRIORITY APPLN. INFO.:			FR 1999-9663	19990726

AB The present invention concerns a compn. comprising vesicles formed from phases of lamellar lipids dispersed in an aq. phase, whereby the lamellar phases incorporate at least one aminophenol deriv. comprising a fatty acid chain with a polar head bound to a nitrogen atom of said aminophenol. The vesicles may have oily cores (oleosomes) or aq. cores (niosomes or liposomes). The aminophenol deriv. preferred is N-cholesteryloxycarbonyl-4-para-aminophenol. The compn. is suitable for use in cosmetics.

MSTR 1



G2 = 57



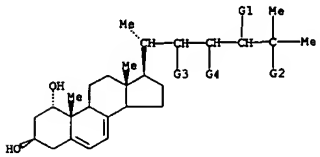
MPL: claim 1

L10 ANSWER 16 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 134:252525 MARPAT
TITLE: Preparation and formulation of active vitamin D derivatives
INVENTOR(S): Tachibana, Yoji
PATENT ASSIGNEE(S): Nisshin Flour Milling Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001089442	A2	20010403	JP 1999-265363	19990920
PRIORITY APPLN. INFO.:			JP 1999-265363	19990920

AB Vitamin D derivs. of formula I [R1, R2 = H, Et, Pr, Bu; R3 = H, OH] are prepd. as bone d. improvers, differentiation inducers, cell multiplication inhibitors, and immunoregulators without causing hypercalcemia. Thus, II was prepd. and shown to be effective in the vitamin D receptor affinity test with a B/BO 50% of 0.01, and was tested against HL-60 cells in the NBT appraisal test. Pharmaceutical compns. contg. I are described.

MSTR 2



MPL: claim 4

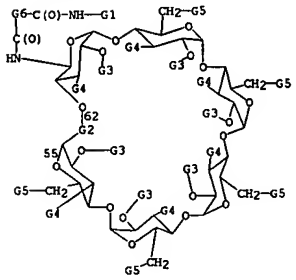
L10 ANSWER 17 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 133:351719 MARPAT
TITLE: Amphiphilic cyclodextrins, their preparation and use for solubilizing and transporting hydrophobic molecules in aqueous media
INVENTOR(S): Auzely-Velty, Rachel; Perly, Bruno; Djedaini-Pilard, Florence
PATENT ASSIGNEE(S): Commissariat a l'Energie Atomique, Fr.
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066635	A1	20001109	WO 2000-FR1102	20000426
W: JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
FR 2792942	A1	20001103	FR 1999-5460	19990429
FR 2792942	B1	20010608		
EP 1177217	A1	20020206	EP 2000-922751	20000426
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002543249	T2	20021217	JP 2000-615663	20000426
PRIORITY APPLN. INFO.:			FR 1999-5460	19990429
			WO 2000-FR1102	20000426

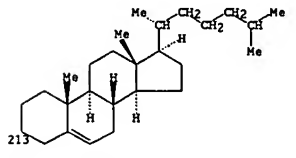
AB Cyclodextrin derivs. of formula I [R1 = steroid residue; R2 = (un)substituted alkyl or aryl; R3 = H, R2; R4 = OR2, or 1 R4 = NHCO(CH2)mCONHR1] are useful for transporting hydrophobic mols. for pharmaceutical or cosmetic uses, by forming organized systems in an aq. medium, independently or assocd. with phospholipids. Thus, 6-azido-6-deoxy-.beta.-cyclodextrin was methylated on the OH groups in the 2 and 6 positions to a tridecamethyl ether, which was converted to the amine, treated with succinic anhydride, and the product amidated with cholest-5-en-3.alpha.-ylamine to give I (R1 = cholest-5-en-3.alpha.-yl, R2 = Me, R3 = H, R4 = OMe, m = 2, n = 6) (II). An aq. soln. of II at a concn. above its crit. micelle concn. formed spherical nanoparticles of diam. 60 .ANG., which could form inclusion compds. with fatty acids and other hydrophobic mols.

MSTR 1

L10 ANSWER 17 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G1 = 213



MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 133:329573 MARPAT
TITLE: Cyclic compounds for cell cycle arrest
INVENTOR(S): Reed, Michael John; Potter, Barry Victor Lloyd
PATENT ASSIGNEE(S): Sterix Limited, UK
SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

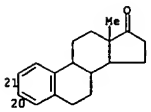
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000066095	A2	20001109	WO 2000-GB1661	20000428
WO 2000066095	A3	20010809		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1173182	A2	20020123	EP 2000-929660	20000428
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002543114	T2	20021217	JP 2000-614980	20000428
ZA 2001008363	A	20021011	ZA 2001-8363	20011011
PRIORITY APPLN. INFO.:			GB 1999-10166	19990430
			US 1999-139520P	19990616
			GB 2000-2113	2D000128
			WO 2000-GB1661	2D000428

AB There is provided use of a cyclic compd., or a pharmaceutically active salt thereof, in the manuf. of a medicament to prevent and/or inhibit and/or arrest cell cycling, wherein the cyclic compd. comprises at least one ring, wherein Group I and Group II, independently of each other, are attached to a ring of the cyclic compd.; wherein Group I is a hydrocarbyl or an oxyhydrocarbyl group; and wherein Group II is (R)(Z)(O)X(:Y) [X = P, S; when X = P, Y is :O or S, Z = OH and R = hydrocarbyl, H; when X = S, Y, Z = :O, R = hydrocarbyl, N(R1)(R2); R1, R2 = H, hydrocarbyl]. Prepn. and activity of e.g. 2-methoxyestrone 3-O-sulfamate against breast cancer cells are described.

MSTR 1

G1 = 21-1 20-3

L10 ANSWER 18 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 1
NTE: or pharmaceutically acceptable salts

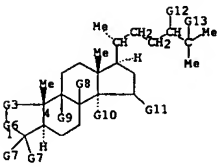
L10 ANSWER 19 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 133:177347 MARPAT
TITLE: Unsaturated cholestane derivatives and their use for the preparation of meiosis regulating medicaments
INVENTOR(S): Blume, Thorsten; Esperling, Peter; Kuhnke, Joachim; Hegele-Hartung, Christa; Lessl, Monika
PATENT ASSIGNEE(S): Schering A.-G., Germany
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000047604	A1	20000817	WO 2000-EP1074	20000209
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2359687	AA	2D000817	CA 2000-2359687	20000209
BR 2000008065	A	20011106	BR 2000-8065	20000209
EP 1150993	A1	20011107	EP 2000-910664	20000209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002536456	T2	20021029	JP 2000-598521	20000209
NO 2001003901	A	20010810	NO 2001-3901	20010810
ZA 2001007387	A	20021206	ZA 2001-7387	2D01D906
PRIORITY APPLN. INFO.:			EP 1999-250040	19990210
			WO 2000-EP1074	2D000209

AB This invention relates to pharmaceutically active unsatd. cholestane derivs., (I) [R1 = H, C2-6 (un)substituted alkyl, substituted Ph, CN, CH2-NH-COA (A = C1-8 (un)substituted alkyl etc.); R2 = H, alkyl, alkenyl, hydroxyalkyl etc; R3 = H, R3R6 = bond double; R4, R7 = H, Me; R5 = H or R2R5 = benzylidene etc.; R8R9 or R8R10 = bond double; R9, R10 = H, R10R11 = bond double; R12, R13 = H or R12R13 = bond double] to pharmaceutical compns. comprising them as active substances and to the use of these novel compds. for the prepn. of medicaments. Thus, I (R1 = .alpha.-CN; R2, R5, R12, R13 = H; R3R6, R8R9, R10R11 = bond double; R4, R7 = Me) was prepd. starting from I (R1 + R2 = R3R6, R8R9, R10R11 = bond double; R5, R12, R13 = H; R4, R7 = Me) via cyanation. More particularly it has been found that the unsatd. cholestane derivs. of the invention can be used for regulating meiosis.

MSTR 1

L10 ANSWER 19 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G3 = 53-4 54-1

G4 = 56

G6 = CHOH
DER: or esters
MPL: claim 1
NTE: substitution is restricted

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 20 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 133:177158 MARPAT
TITLE: Preparation of cyclic substituted fused pyrrolocarbazoles and isoindolones with protein kinase inhibiting activity for pharmaceutical use
INVENTOR(S): Hudkins, Robert L.; Reddy, Dandu; Singh, Jasbir; Stripathy, Rabindranath; Underiner, Theodore L.
PATENT ASSIGNEE(S): Cephalon, Inc., USA
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000047583	A1	20000817	WO 2000-US3476	20000211
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2359772	AA	20000817	CA 2000-2359772	20000211
EP 1165562	A1	20020102	EP 2000-911759	20000211
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000008056	A	20020409	BR 2000-8056	20000211
JP 2003529537	T2	20031007	JP 2000-598503	20000211
HR 2001000583	A1	20020831	HR 2001-583	20010807
NO 2001003887	A	20011011	NO 2001-3887	20010809
BG 105890	A	20020628	BG 2001-105890	20010911
PRIORITY APPLN. INFO.:			US 1999-119834P	19990212
			US 2000-500849	20000210
			WO 2000-US3476	20000211

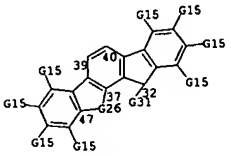
AB Fused pyrrolocarbazoles and isoindolones, such as I (R1 = H, alkyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl; R3-6 = H, CN, CF3, OH, CH2OH, halogen, aryl, heteroaryl, acyl, acyloxy, amino, etc.; Q = O, S, NR7; W = CR8R9; X, Y = H2, O; R7 = H, alkyl, heterocyclylalkyl, etc.; R8, R9 = H, OH, cycloalkyl, cycloalkylmethyl, heterocyclyl, heterocyclylalkyl, etc.), were prepd. for use as agents for the regulation of protein kinase and for the treatment of prostate disorders, neoplasia, rheumatoid arthritis, pulmonary fibrosis, etc. Thus, II (R = oxiranylmethyl) was prepd. in 71% yield by via reaction of (.+-.)-glycidyl mesylate and Rink's acid resin bound 6,7,12,13-tetrahydro-5H-indeno[2,1-a]pyrrolo[3,4-c]carbazol-5-one. The prepd. compds. were tested for inhibitory activity against a variety of protein kinases, such as trkA tyrosine kinase, vascular endothelial growth factor receptor kinase, protein kinase C, etc.

MSTR 1

L10 ANSWER 20 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G26 = 119-47 120-37

G28 = CH2
G49 = 39-2 40-4 32-45



MPL: claim 1
NTE: substitution is restricted
NTE: additional ring formation also claimed

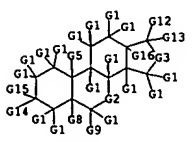
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 21 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 133:34421 MARPAT
TITLE: Use of 17-ketosteroid compounds and derivatives, metabolites, and precursors thereof in treatment of toxoplasmosis and cryptosporidiosis
INVENTOR(S): Ahlem, Clarence Nathaniel; Frincke, James Martin; Prendergast, Patrick T.; Thadikonda, Krupakar Paul
PATENT ASSIGNEE(S): Hollis-Eden Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032176	A2	20000608	WO 1999-US28080	19991124
WO 2000032176	A3	20001207		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 2001003845	A	20020513	ZA 2001-3845	20010511
PRIORITY APPLN. INFO.:			US 1998-110127P	19981127
			US 1999-124087P	19990311
			US 1999-126056P	19990323

AB 17-Keto steroids and related compds., e.g. 16.alpha.-bromoepiandrosterone (I), and their pharmaceutically acceptable salts are used to treat infections with Toxoplasma or Cryptosporidium and to ameliorate or reduce symptoms assocd. with such infections. Thus, a suspension was prepd. contg. 50 mg I/mL in PEG-300 25, EtOH 12.5, benzyl benzoate 5, and propylene glycol 5%. I.v. administration of the steroids is preferred. The keto steroids may also be used to treat, or to ameliorate symptoms assocd. with, retroviral infections or malaria in humans.

MSTR 1A



G2 = 42

L10 ANSWER 21 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G3 = 45

MPL: claim 1
NTE: further derivatization also claimed

L10 ANSWER 22 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 133:12779 MARPAT
TITLE: Hexapeptide with the stabilized disulfide bond and derivatives thereof regulating metabolism, proliferation, differentiation and apoptosis
INVENTOR(S): Kozhemyakin, Leonid Andreevich; Kozhemyakin, Andrei Leonidovich; Balazovsky, Mark Borisovich
PATENT ASSIGNEE(S): Zakrytoe Aktsionernoe Obschestvo "vam", Russia
SOURCE: PCT Int. Appl., 127 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

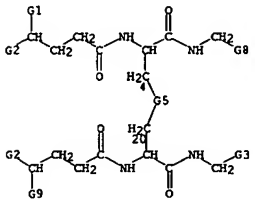
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031120	A2	20000602	WO 1999-RU453	19991119
WO 2000031120	A3	20001026		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
RU 2144374	C1	20000120	RU 1998-120753	19981123
RU 2153350	C1	20000727	RU 1999-105585	19990326
EP 1131340	A2	20010912	EP 1999-968424	19991119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002538079	T2	20021112	JP 2000-583947	19991119

PRIORITY APPLN. INFO.: RU 1998-120753 19981123
RU 1999-105585 19990326
WO 1999-RU453 19991119

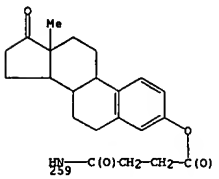
AB The present invention relates to a composite regulating metab., proliferation, differentiation and apoptotic mechanisms and applicable for the treatment for a variety of medical conditions, the composite comprising and oxidized glutathione-based compd., which has a disulfide bond, and a metal material, in particular where the metal is either platinum or palladium. The oxidized glutathione-based compd. and metal material can be present in a ratio of 3000:1 and preferably 1000:1. The oxidized glutathione-based compd. can be oxidized glutathione itself or salts or derivs. A feature of the invention is that the composite has a more stabilized disulfide bond than the oxidized glutathione-based compd. itself that significantly enhanced the biol.-pharmacol. activity of the composite and increased ability thereof for chem. modification resulting in new products possessing new therapeutic effects. Methods for prepg. the composite are provided, such methods being beneficial in that the composite is provided in high yields and at high purity. Methods for treatment of oncol., infectious, immunolog., hematol., ischemic, neurodegenerative, metab. disorders and endocrine diseases with the composites of the present invention are also disclosed. For example, the composite contg. bis(L-phenylalanyl-.gamma.-L-glutamyl)-L-cystinyl-bis-glycine disodium salt and cisplatin was prepd. in a yield of 80% using glutathione and N-hydroxymethylbenzamide as starting materials and H2O2 as an oxidizing agent.

L10 ANSWER 22 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MSTR 1



G2 = 259



DER: and salts and metal complexes
MPL: claim 9
NTE: also incorporates claims 27
NTE: additional bridging also claimed

L10 ANSWER 23 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 132:112756 MARPAT
TITLE: Compositions which contain triterpenes for regulating hair growth
INVENTOR(S): Bradbury, James Barton; Schafer, Shari Joy; Kaczvinsky, Joseph Robert, Jr.; Bailey, Dorothy; Gale, Celeste Dawn
PATENT ASSIGNEE(S): The Procter & Gamble Company, USA
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

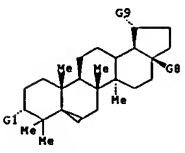
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000003748	A2	20000127	WO 1999-US16099	19990716
WO 2000003748	A3	20000615		
W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2337848	AA	20000127	CA 1999-2337848	19990716
AU 9951062	A1	20000207	AU 1999-51062	19990716
EP 1119338	A2	20010801	EP 1999-935620	19990716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002520375	T2	20020709	JP 2000-559882	19990716

PRIORITY APPLN. INFO.: US 1998-93193P 19980717
WO 1999-US16099 19990716

AB The present invention relates to compns. contg. (1) 0.0001-99.9 % of certain compds. selected from the group consisting of lupane triterpenes, derivs. of lupane triterpenes, derivs. of oleanane triterpenes, derivs. of ursane triterpenes, and salts and mixts. thereof, and (2) a vehicle. A hair tonic soln. contained betulinic acid 5, Tween-20 1, isopropanol 47, propylene glycol 28.2, and dimethylisosorbide 18.8 %.

L10 ANSWER 23 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MSTR 1



MPL: claim 1

L10 ANSWER 24 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 130:202922 MARPAT
TITLE: Energy-sensitive resist material and a process for device fabrication using the energy-sensitive resist material
INVENTOR(S): Chandross, Edwin Arthur; Houlihan, Francis Michael; Nalamasu, Omkaram; Reichmanis, Elsa; Wallow, Thomas Ingolf
PATENT ASSIGNEE(S): Lucent Technologies Inc., USA
SOURCE: U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 803,703.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

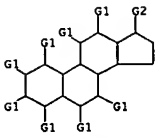
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5879857	A	19990309	US 1997-813732	19970307
US 5843624	A	19981201	US 1997-803703	19970221
EP 880074	A1	19981125	EP 1998-301562	19980303
EP 880074	B1	19991027		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO				
JP 10307401	A2	19981117	JP 1998-57221	19980309
US 5998099	A	19991207	US 1998-83168	19980522

PRIORITY APPLN. INFO.: US 1997-803703 19970221
US 1997-813732 19970307
US 1997-60869P 19971002

AB A process for device fabrication and an energy-sensitive resist material used in the process are disclosed. The resist material contains a polymer in combination with a dissoln. inhibitor and a photoacid generator. The dissoln. inhibitor is the condensation reaction product of a satd. polycyclic hydrocarbon compd. with at least one hydroxy substituent and a difunctional satd. linear, branched, or cyclic hydrocarbon compd. wherein the functional groups are either carboxylic acid or carboxylic acid chloride groups. The condensation product has at least two polycyclic moieties. The polymer optionally has acid-labile groups pendant thereto which significantly decrease the soly. of the polymer in a soln. of aq. base. A film of the resist material is formed on a substrate and exposed to a delineating radiation. The radiation induces a chem. change in the resist material rendering the exposed resist material substantially more sol. in an aq. base soln. than the unexposed portion of the resist material. The image introduced into the resist material is developed using conventional techniques, and the resulting pattern is then transferred into the underlying substrate.

MSTR 1

L10 ANSWER 24 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 4
NTE: also incorporates claim 9

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

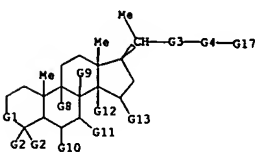
L10 ANSWER 25 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 130:52629 MARPAT
TITLE: Preparation of 17.beta.-allyloxy(thio)alkylandrostane derivatives for the modulation of meiosis
INVENTOR(S): Leemhuis, Johannes Antonius Joseph; Van der Louw, Jaap; Groen, Marinus Bernard
PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9855498	A1	19981210	WO 1998-EP3191	19980528
W: AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, ID, IL, IS, JP, KG, KP, KR, LK, LR, LT, LV, MD, MG, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9885353	A1	19981221	AU 1998-85353	19980528
EP 988312	A1	20000329	EP 1998-936293	19980528
EP 988312	B1	20020403		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9809733	A	20001003	BR 1998-9733	19980528
JP 2002502404	T2	20020122	JP 1999-501445	19980528
AT 215555	E	20020415	AT 1998-936293	19980528
NO 9905935	A	20000203	NO 1999-5935	19991203
US 6262282	B1	20010717	US 1999-445202	19991203

PRIORITY APPLN. INFO.: EP 1997-201691 19970604
WO 1998-EP3191 19980528

AB 17.beta.-Allyloxy(thio)alkyl-androstane derivs. of formula I [R1 = (substituted) OH, OSO3H, etc.; R2-R5 = H, alkyl; R6-R8 = H, Ph, halo; R6R7, R7R8 = cycloalkyl; n = 0-2; X = O, S, S(O), SO2] are prepd. The compds. of the invention have meiosis activating activity and can be used for the control of fertility. Thus, II was prepd. from 3.beta.-hydroxypregn-5-en-20-one and 4-bromo-2-methyl-2-butene in many steps. II showed 100% germinal vesicle breakdown in oocytes.

MSTR 1



G1 = 38

L10 ANSWER 25 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

DER: or pharmaceutically acceptable salts
MPL: claim 1

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

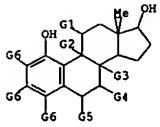
L10 ANSWER 26 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 130:52627 MARPAT
TITLE: Non-estrogenic estradiol derivatives with an antioxidant activity
INVENTOR(S): Droescher, Peter; Menzenbach, Bernd; Romer, Wolfgang; Schneider, Brigitt; Elger, Walter; Kaufmann, Gunter
PATENT ASSIGNEE(S): Jenapharm Gmbh & Co., Ltd., Germany
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9855496	A1	19981210	WO 1998-DE1392	19980520
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19723794	A1	19981210	DE 1997-19723794	19970606
AU 9884303	A1	19981221	AU 1998-84303	19980520
EP 986573	A1	20000322	EP 1998-934761	19980520
EP 986573	B1	20021009		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002510295	T2	20020402	JP 1999-501255	19980520
AT 225800	E	20021015	AT 1998-934761	19980520
ES 2185187	T3	20030416	ES 1998-934761	19980520
US 6436917	B1	20020820	US 1998-92289	19980605
US 2002065258	A1	20020530	US 2001-990517	20011121
PRIORITY APPLN. INFO.:			DE 1997-19723794	19970606
			WO 1998-DE1392	19980520
			US 1998-92289	19980605

AB New non-estrogenic estradiol derivs. I (R1 = H, OH; R2, R3 = H, Me; dashed line = one or two double bonds), whereby the hydroxy group can exist as an ether, ester or sulfamate except for 4-methylestra-1,3,5(10)-triene-1,17.beta.-diol, and II [Z = (CH2)nAPh; n = 0, 1; when n= 0, 1 A = bond; when n = 1, A = O, S, Se; Ph = (un)substituted phenyl] whereby the hydroxy group can exist as an ether, ester or sulfamate, with antioxidant activity are disclosed. These estradiol derivs., which have no estrogenic effect but a high antioxidant effect, are potentially useful as non-estrogenic antioxidants, in particular for postmenopausal women and for men; moreover, the disclosed compds. are potential aromatase and sulfatase inhibitors. Thus, I [R1 = R2 = H, R3 = 4-Me, dashed lines = single bonds, C(17)= .beta.-OH] showed 0.04 % binding to estrogen receptor but lipid peroxidn. inhibition (IC50 = 1.7 .mu.mol/L), 22.26% inhibition of Fe(II)-autoxidn. and 19.23% stimulation of Fe(III) redn.

MSTR 1

L10 ANSWER 26 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



DER: and ethers, esters or sulfamates
MPL: claim 1
NTE: substitution is restricted

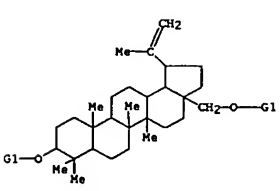
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 27 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 130:52599 MARPAT
TITLE: synthesis and antitumor activity of betulinol derivatives and monoclonal antibody conjugates
INVENTOR(S): Bomshteyn, Arkadiy L.; Rathnam, Premila; Saxena, Brij B.
PATENT ASSIGNEE(S): Cornell Research Foundation, Inc., USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9855497	A1	19981210	WO 1998-US11456	19980603
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9878135	A1	19981221	AU 1998-78135	19980603
EP 988311	A1	20000329	EP 1998-926258	19980603
R: DE, FR, GB, IT				
US 2003036540	A1	20030220	US 2002-212576	20020802
PRIORITY APPLN. INFO.:			US 1997-48621P	19970604
			US 1998-89894	19980603
			WO 1998-US11456	19980603

AB Syntheses of betulinol derivs. (I) (X, Y1 = independently OH, alkoxy, alkanoyloxy, -peptide-NHNH-C(O)-antibody-OH moiety) and betulinol-antibody conjugates (II) (A1 = I-peptide-NHN=CH, I-peptide-NHNH) are disclosed.

MSTR 1



MPL: claim 1

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 28 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 129:81885 MARPAT
TITLE: Processes for preparation of 9,11-epoxy steroids and their intermediates
INVENTOR(S): Ng, John S.; Liu, Chin; Anderson, Dennis K.; Lawson, Jon P.; Wieczorek, Joseph; Kunda, Sastry A.; Letendre, Leo J.; Pozzo, Mark J.; Sing, Yuen-lung L.; Wang, Ping T.; Yonan, Edward E.; Weier, Richard M.; Kowar, Thomas R.; Baez, Julio A.; Erb, Bernhard
PATENT ASSIGNEE(S): G.D. Searle & Co., USA; Ng, John S.; Liu, Chin; Anderson, Dennis K.; Lawson, Jon P.; Wieczorek, Joseph; Kunda, Sastry A.; Letendre, Leo J.; Pozzo, Mark J.; et al.
SOURCE: PCT Int. Appl., 543 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9825948	A2	19980618	WO 1997-US23090	19971211
WO 9825948	A3	19981015		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
ZA 9711038	A	19990125	ZA 1997-11038	19971209
AU 9857983	A1	19980703	AU 1998-57983	19971211
AU 733559	B2	20010517		
EP 944644	A2	19990929	EP 1997-954126	19971211
EP 944644	B1	20021002		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1253564	A	20000517	CN 1997-181737	19971211
BR 9714510	A	20001128	BR 1997-14510	19971211
NZ 336004	A	20010427	NZ 1997-336004	19971211
JP 2001509792	T2	20010724	JP 1998-527032	19971211
EP 1148061	A2	20011024	EP 2001-111209	19971211
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
EP 1223174	A2	20020717	EP 2002-7309	19971211
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
AT 225367	E	20021015	AT 1997-954126	19971211
NZ 510556	A	20021025	NZ 1997-510556	19971211
ES 2186017	T3	20030501	ES 1997-954126	19971211
ZA 9805088	A	19990611	ZA 1998-5088	19980611
NO 9902825	A	19990729	NO 1999-2825	19990610
AU 747959	B2	20020530	AU 2000-18440	20000221
US 2002038021	A1	20020328	US 2000-732208	20001207
US 2002045746	A1	20020418	US 2000-732209	20001207
US 2003055274	A1	20030320	US 2002-112355	20020329
US 6610844	B2	20030826		
PRIORITY APPLN. INFO.:			US 1996-33315P	19961211
			US 1997-49388P	19970611
			US 1995-8455P	19951211
			US 1996-763910	19961211
			EP 1997-954126	19971211

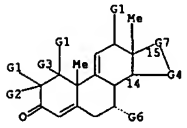
L10 ANSWER 28 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

	NZ 1997-336004	19971211
	WO 1997-US23090	19971211
	US 1999-246204	19990208
	US 1999-246908	19990209
	US 1999-169556P	19991208
	US 1999-169608P	19991208
	US 1999-169639P	19991208
	US 1999-169682P	19991208
	US 1999-169683P	19991208
	US 1999-169690P	19991208
	US 1999-169707P	19991208
	US 1999-169807P	19991208
	US 1999-319673	19991213
	US 2000-583137	20000530
	US 2000-583158	20000530

OTHER SOURCE(S): CASREACT 129:81885

AB Multiple novel reaction schemes, novel process steps and novel intermediates are provided for the synthesis of epoxymexrenone and other compds. of formula (I) wherein: -A-A- represents the group -CHR4-CHR5- or -CR4=CR5-, R3, R4 and R5 are independently selected from the group consisting of hydrogen, halo, hydroxy, lower alkyl, lower alkoxy, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, cyano, aryloxy; R1 represents an alpha-oriented lower alkoxycarbonyl or hydroxyalkyl radical; -B-B- represents the group -CHR6-CHR7- or an alpha- or beta-oriented group (II), where R6 and R7 are independently selected from the group consisting of hydrogen, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy; and R8 and R9 are independently selected from the group consisting of hydrogen, hydroxy, halo, lower alkoxy, acyl, hydroxyalkyl, alkoxyalkyl, hydroxycarbonyl, alkyl, alkoxycarbonyl, acyloxyalkyl, cyano and aryloxy, or R8 and R9 together comprise a carbocyclic or heterocyclic ring structure, or R8 or R9 together with R6 or R7 comprise a carbocyclic or heterocyclic ring structure fused to the pentacyclic D ring.

MSTR 1



G4 = 26-14 27-15

L10 ANSWER 28 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

G7 = 39

DER: or salts
MPL: claim 1
NTE: additional ring formation also claimed

L10 ANSWER 29 OF 50 MARPAT COPYRIGHT 2003 ACS on STN

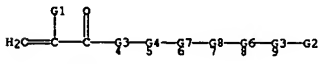
ACCESSION NUMBER: 128:295176 MARPAT
TITLE: Preparation of monomers useful in the production of liquid-crystalline polymers
INVENTOR(S): Gailberger, Michael; Strelzyk, Katja; Grundig, Petra; Barth, Anne; Dannenhauer, Fritz; Strohriegl, Peter; Stohr, Andreas
PATENT ASSIGNEE(S): Daimler-Benz A.-G., Germany
SOURCE: Ger. Offen., 10 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19643048	A1	19980423	DE 1996-19643048	19961018
EP 837054	A2	19980422	EP 1997-116765	19970926
EP 837054	A3	19990414		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 10182556	A2	19980707	JP 1997-320232	19971017
US 6049000	A	20000411	US 1997-953976	19971020
US 6423865	B1	20020723	US 2000-516511	20000301
US 6313326	B1	20011106	US 2000-526756	20000316

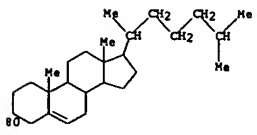
PRIORITY APPLN. INFO.: DE 1996-19643048 19961018
US 1997-953976 19971020

AB The title monomers, of specified structure and bearing (meth)acrylate groups and vinyl ether, epoxy, or azide groups, are prepd. Adding 21 mmol MeSO2Cl dropwise to 21 mmol 4-[2-(vinyloxy)ethoxy]benzoic acid and 21 mmol Et3N in 1,2-dimethoxyethane stirred at .ltoreq.-25.degree., stirring for 1 h at -30.degree., adding 21 mmol 4-[[6-(acryloyloxy)hexyl]oxy]phenol, 2 mmol 4-(dimethylamino)pyridine, and 100 mg BHT, and stirring at 0-5.degree. for 3 h gave 78% 4-[[6-(acryloyloxy)hexyl]oxy]phenyl 4-[2-(vinyloxy)ethoxy]benzoate (I). AIBN-initiated polymn. of I in THF in the presence of 4 mol% C10H21SH at 60.degree. for 48 h gave an oligomer (no.-av. mol. wt. .apprx.20,000) showing a nematic phase with a clear point at .apprx.100.degree..

MSTR 1



G2 = 80



L10 ANSWER 29 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MPL: claim 16
NTE: alkylene in G3 may be interrupted by oxygen atoms

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

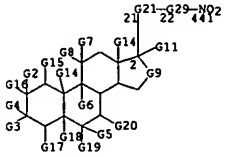
L10 ANSWER 30 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 128:294939 MARPAT
TITLE: Preparation of nitrate esters of corticoid compounds and pharmaceutical applications thereof
INVENTOR(S): Del Soldato, Piero
PATENT ASSIGNEE(S): Nicox S.A., Fr.; Del Soldato, Piero
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9815568	A2	19980416	WO 1997-EP5426	19971002
WO 9815568	A3	19980618		
W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9747803	A1	19980505	AU 1997-47803	19971002
AU 719250	B2	20000504		
EP 929565	A2	19990721	EP 1997-910409	19971002
EP 929565	B1	20020529		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, SI, LT, FI, RO				
BR 9711586	A	19990824	BR 1997-11586	19971002
CN 1253563	A	20000517	CN 1997-180284	19971002
JP 2001501637	T2	20010206	JP 1998-517154	19971002
AT 218142	E	20020615	AT 1997-910409	19971002
RU 2186781	C2	20020810	RU 1999-108661	19971002
ES 2177952	T3	20021216	ES 1997-910409	19971002
US 6610676	B1	20030826	US 1999-269729	19990402
KR 2000048911	A	20000725	KR 1999-702942	19990403
PRIORITY APPLN. INFO.:			IT 1996-MI2048	19961004
			WO 1997-EP5426	19971002

AB The title compds. of the general formula B-X1-NO2 or their esters or salts, where B has structure I where there may be substituents in place of the H in the CH group or two hydrogens H2 in the CH2 group shown in the general formula; R and R1 are equal or different one from the other and may be hydrogen or linear or branched alkyls having from 1 to 4 carbon atoms, preferably R = R1 = CH3; B being a corticosteroid residue; R2 is -(CO-L)x-(X)y- where x and y are integers equal or different one from the other and equal to 0 or 1; where L is a bivalent connecting group; X is equal to X2 where X2 = O, NH, NR3 where R3 is a linear or branched alkyl having from 1 to 10 C atoms; or equal to X3 where X3 is equal to OH, CH3, Cl, N(CH2CH3)2, SCH2F, SH; X1 is a bivalent connecting bridge YO where Y is a C1-C20 alkylene were prepd. Thus, hydrocortisone was treated with 4-chlorobutanoyl chloride followed by treatment with AgNO2 to give the nitro deriv. II. II had a 62% antiarthritic activity in rats at 10 mg/kg, but did not affect cardiovascular parameters.

MSTR 1

L10 ANSWER 30 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G9 = 259

DER: or esters or salts
MPL: claim 1
NTE: additional ring fusion also claimed

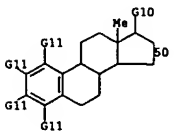
L10 ANSWER 31 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 128:205039 MARPAT
TITLE: Preparation and biological activity of antimicrobial steroidal amino compounds
INVENTOR(S): Schoenecker, Bruno; Wyrwa, Ralf; Moellmann, Ute; Krieg, Reimar; Dubs, Manuela
PATENT ASSIGNEE(S): Friedrich-Schiller-Universitaet Jena, Germany; Hans-Knoell-Institut fuer Naturstofforschung
SOURCE: Ger. Offen., 20 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19633206	A1	19980219	DE 1996-19633206	19960817
DE 19633206	C2	20010329		
PRIORITY APPLN. INFO.:			DE 1996-19633206	19960817

AB Steroidal amines [RNR1R5aCR2R3R4]a+ Aa- [a = 0, 1; R = steroid, cholanyl, cardenolide, bufadienolide deriv.; R1 - R5 = H, alkyl; A = anion; when a = 0: R1R2 = bond; R3 = (CH2)xR6, x .gtoreq. 0; R6 = (un)substituted Ph, pyridyl, pyrrolyl, furyl, thienyl, ferrocenyl; R4 = H, alkyl, R3; or when a = 0: R1 = H, alkyl, aryl, acyl, (CH2)yR3, y .gtoreq. 0; R2 = H; R3 = (CH2)xR6; R4 = H, alkyl, R3; when a = 1: R1 = H, alkyl, aryl; R2 = H; R3 = (CH2)xR6; R4 = H, alkyl, R3; R5 = H, alkyl, (CH2)yR7; R7 = (un)substituted Ph, pyridyl, pyrrolyl, furyl, thienyl, ferrocenyl] , [I]a+ Aa- (R8,R9 = H, halo, NO2, OH, alkoxy, aryloxy, acyloxy, acyl, alkyl, aryl; R10 = NR1R5aCR2R3R4), [II]a+ Aa- , [III]a+ Aa- and [IV]a+ Aa- with antimicrobial activity were prepd. from the resp. aminosteroids. Steroid I [R1 = R2 = R4 = H, R3 = 2-pyridylmethyl, R8 = .beta.-OH, R9 = OMe, a = 0 (V)] was prepd. via reaction of 16.beta.-amino-3-methoxyestra-1,3,5(10)-trien-17.beta.-ol with .alpha.-vinylpyridine in MeOH followed by treatment with AcOH. V showed antibacterial activity [25 .mu.g/mL vs. Mycobact. smeg. (SG 987) and Mycobact. fort. B; 12.5 .mu.g/mL vs. Mycobact. chel. B and Mycobact. aurum (SB 66); 12.5 .mu.g/mL vs. Mycobact. vaccae (10670)].

MSTR 1

G1 = 50



MPL: claim 1
NTE: subsitution is restricted

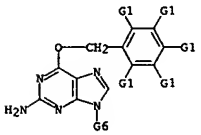
L10 ANSWER 31 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

L10 ANSWER 32 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 128:34634 MARPAT
TITLE: Preparation of O6-substituted guanine compounds and methods for depleting O6-alkylguanine-DNA alkyltransferase activity
INVENTOR(S): Moschel, Robert C.; Dolan, M. Eileen; Pegg, Anthony E.; McDougall, Mark G.; Chae, Mi-Young
PATENT ASSIGNEE(S): United States Dept. of Health and Human Services, USA; Penn State Research Foundation; Arch Development Corp.
SOURCE: U.S., 25 pp., Cont.-in-part of U.S. Ser. No. 875,438, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5691307	A	19971125	US 1994-255190	19940607
US 492468	A0	19900715	US 1990-492468	19900313
US 5091430	A	19920225		
US 5352669	A	19941004	US 1990-616913	19901121
US 5358952	A	19941025	US 1991-805634	19911212
PRIORITY APPLN. INFO.:			US 1990-492468	19900313
			US 1990-616913	19901121
			US 1991-805634	19911212
			US 1992-875438	19920429

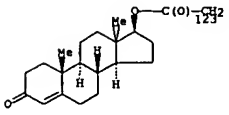
AB Novel O6-substituted guanine compds. I [X1-5 = H, halogen, OH, aryl, alkylaryl, NO2, polycyclic arom. alkyl; Z = (un)substituted aryl, carbamoylalkyl, dialkoxymethyl, alkoxyhydroxyalkyl, carboalkoxyalkyl, (di)alkylaminohydroxyalkyl or alkyl-linked peptide, monosaccharide, oligosaccharide, nucleic acid segment, steroid, SOnR1; R1 = alkyl, aryl; n = 0 - 3] are effective at reducing O6-alkylguanine-DNA alkyltransferase (AGT) are useful for treating tumors and when used with antineoplastic alkylating agents enhance the chemotherapeutic treatment of tumor cells in a host. Guanine deriv. II was prepd. from O6-benzylguanine via sequential reaction with neat epichlorohydrin and then with isopropylamine in dioxane. II was effective at reducing O6-alkylguanine-DNA alkyltransferase activity, ED50 = 106 .mu.M in HT29 cell-free ext. and ED50 = 23 .mu.M in HT29 cells.

MSTR 1



G6 = 123

L10 ANSWER 32 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



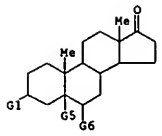
MPL: claim 1
NTE: also incorporates claims 3, 4 and 29

L10 ANSWER 33 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 128:727 MARPAT
TITLE: DHEA combination therapy with interleukin antibodies for antiviral, antibacterial, antimycoplasmal, or anti-intracellular parasite therapy
INVENTOR(S): Prendergast, Patrick T.
PATENT ASSIGNEE(S): Prendergast, Patrick T., Ire.
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9738695	A1	19971023	WO 1997-IB414	19970417
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2251733	AA	19971023	CA 1997-2251733	19970417
AU 9725741	A1	19971107	AU 1997-25741	19970417
AU 734807	B2	20010621		
EP 901375	A1	19990317	EP 1997-917365	19970417
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1216470	A	19990512	CN 1997-193912	19970417
JP 2000508654	T2	20000711	JP 1997-536909	19970417
WO 9847516	A1	19981029	WO 1997-EP5716	19971016
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9852219	A1	19981113	AU 1998-52219	19971016
NO 9804851	A	19981217	NO 1998-4851	19981016
KR 2000005539	A	20000125	KR 1998-708339	19981017
PRIORITY APPLN. INFO.:			US 1996-15695P	19960417
			WO 1997-IB414	19970417
			WO 1997-EP5716	19971016

AB There are provided medicaments, methods of making them, and kits, which include (1) a 17-ketosteroid compd. and/or (2) anti-serum either poly- or monoclonal to Interleukin 10, Interleukin 2, or Interleukin 12, or with any compd. which can effectively inhibit synthesis or the biol. function of Interleukin 10, Interleukin 12, or Interleukin 2, or with an Interleukin 10, Interleukin 12, or Interleukin 2 receptor mol.-blocking agent, or with anti-serum, either polyclonal or monoclonal to human .alpha.-fetoprotein. There are also provided methods of treatment involving such compds. or combinations of compds., including enhancing Th1 immune protective responses when using the 17-ketosteroid compd. as an anti-viral, anti-bacterial, anti-mycoplasm or anti-intracellular parasitic agent.

L10 ANSWER 33 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
MSTR 2



MPL: claim 19

L10 ANSWER 34 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 127:121915 MARPAT
TITLE: Preparation of novel steroid nitrite/nitrate ester derivatives for use as antiinflammatory drugs
INVENTOR(S): Tjoeng, Foe S.; Currie, Mark G.; Zupec, Mark E.
PATENT ASSIGNEE(S): G.D. Searle & Co., USA; Tjoeng, Foe S.; Currie, Mark G.; Zupec, Mark E.
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

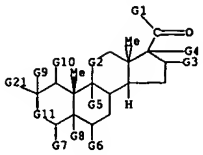
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9721721	A1	19970619	WO 1996-US19219	19961206
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5707984	A	19980113	US 1995-569812	19951208
CA 2239910	AA	19970619	CA 1996-2239910	19961206
AU 9712772	A1	19970703	AU 1997-12772	19961206
EP 873351	A1	19981028	EP 1996-943559	19961206
EP 873351	B1	20000802		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2000501732	T2	20000215	JP 1997-522081	19961206
AT 195128	E	20000815	AT 1996-943559	19961206
ES 2150152	T3	20001116	ES 1996-943559	19961206

PRIORITY APPLN. INFO.: US 1995-569812 19951208
WO 1996-US19219 19961206

AB Nitrite/nitrate steroid esters I [XX1 = C:CH, CHCH2; X2X3 = C(R5):CH, CH(R5)CH2; Q = P = H, halogen, alkyl; R1 = H, OH, ONO, ONO2, halogen, sulfydryl, alkylthio, acyloxy, alkoxy, silyloxy, alkyl, alkenyl, alkynyl; R2 = H, OH, ONO, ONO2, alkoxy; R3 = R4 = H, OH, ONO, ONO2, alkyl, alkenyl, alkynyl, alkoxy; R5 = H, halogen; R6 = H, OH, oxo] were prepd. for use as antiinflammatory agents and smooth muscle relaxants. Thus, pregna-1,4-dien-3,20-dione nitrite ester II was prepd. by reacting prednisolone-21-acetate with amyl nitrite in acetic acid, and, when tested for smooth muscle relaxant activity, II gave an EC50 value of 0.02 .mu.M compared to >100 .mu.M for prednisolone.

MSTR 1

L10 ANSWER 34 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



G2 = C(O)
G11 = C(O)
DER: and pharmaceutically acceptable esters and prodrugs
MPL: claim 1
NTE: substitution is restricted

L10 ANSWER 35 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 127:66093 MARPAT
TITLE: Preparation of sugar ethers by using rare earth metal catalysts
INVENTOR(S): Hashizume, Naomichi; Etsuno, Junji; Kobayashi, Osamu
PATENT ASSIGNEE(S): Kao Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09157287	A2	19970617	JP 1995-316704	19951205

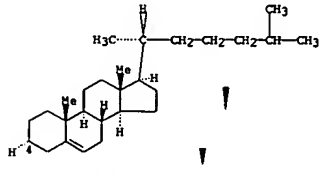
PRIORITY APPLN. INFO.: JP 1995-316704 19951205
OTHER SOURCE(S): CASREACT 127:66093

AB R(OA)n(OH)z-n [A = glycoside (deriv.) residue; R = C1-36 linear or branched alkyl, alkenyl, cycloalkyl, cholesteryl, cholestanoyl, sugar (deriv.) residue; when R = sugar (deriv.) residue, then z = no. of OH of the sugar (deriv.); when R .noteq. sugar (deriv.) residue, then z = 1; n = 1-z] are prepd. by treatment of AOB (A = same as above; B = H, acyl) with R(OD)z (R, z = same as above; D = H, Me3Si) in the presence of (RfSO3)3M (Rf = perfluoroalkyl, perfluoroalkoxy; M = rare earth metal) and/or rare earth metal perfluorinated ionomers. 1-O-acetyl-2,3,5-tri-O-benzyl-.beta.-D-ribofuranose was treated with cyclohexanol trimethylsilyl ether and Yb triflate in CH2Cl2 at room temp. for 5.5 h to give 85% 1-O-cyclohexyl 2,3,5-tri-O-benzyl-D-ribofuranoside.

MSTR 2

G1—G2

G1 = 4



MPL: claim 1

L10 ANSWER 36 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 125:107063 MARPAT
TITLE: Cationic amphiphiles and plasmids for intracellular delivery of therapeutic molecules
INVENTOR(S): Siegel, Craig S.; Harris, David J.; Lee, Edward R.; Hubbard, Shirley C.; Cheng, Seng H.; Eastman, Simon J.; Marshall, John; Scheule, Ronald K.; Yew, Nelson S.; et al.
PATENT ASSIGNEE(S): Genzyme Corporation, USA
SOURCE: PCT Int. Appl., 152 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

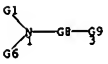
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9618372	A2	19960620	WO 1995-US16174	19951208
WO 9618372	A3	19960906		
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5650096	A	19970722	US 1994-352479	19941209
US 5747471	A	19980505	US 1995-540867	19951011
US 6071890	A	20000606	US 1995-545473	19951019
AU 9645161	A1	19960703	AU 1996-45161	19951208
AU 716706	B2	20000302		
EP 799059	A1	19971008	EP 1995-943769	19951208
EP 799059	B1	20020731		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
JP 10510813	T2	19981020	JP 1995-519236	19951208
AT 221390	E	20020815	AT 1995-943769	19951208
AU 9732315	A1	19980417	AU 1997-32315	19970610
AU 736143	B2	20010726		
EP 1007003	A1	20000614	EP 1997-927989	19970610
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001500897	T2	20010123	JP 1998-515603	19970610
US 2002013282	A1	20020131	US 1998-166074	19981005

PRIORITY APPLN. INFO.: US 1994-352479 19941209
US 1995-434P 19950926
US 1995-439P 19950927
US 1995-540867 19951011
US 1995-545473 19951019
WO 1995-US16174 19951208
WO 1997-US9748 19970610

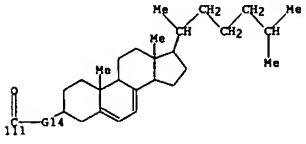
AB Novel cationic amphiphiles are provided that facilitate transport of biol. active (therapeutic) mols. into cells. The amphiphiles contain lipophilic groups derived from steroids, from mono or dialkylamines, or from alkyl or acyl groups; and cationic groups, protonatable at physiol. pH, derived from amines, alkylamines or polyalkylamines. Thus, N4-spermidine cholesteryl carbamate provided an .apprx.20-fold enhancement of the transfection ability of plasmid pCMVHI-CAT (chloramphenicol acetyltransferase-encoding) in mice. There are provided also therapeutic compns. prepd. typically by contacting a dispersion of one or more cationic amphiphiles with the therapeutic mols. Therapeutic mols. that

L10 ANSWER 36 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)
can be delivered into cells according to the practice of the invention include DNA, RNA, and polypeptides. Representative uses of the therapeutic compns. of the invention include providing gene therapy, and delivery of antisense polynucleotides of biol. active polypeptides to cells. With respect to therapeutic compns. for gene therapy, the DNA is provided typically in the form of a plasmid for complexing with the cationic amphiphile. Novel and highly effective plasmid constructs are also disclosed, including those that are particularly effective at providing gene therapy for clin. conditions complicated by inflammation. Several vectors were constructed for improved delivery of the gene the cystic fibrosis transmembrane conductance regulator (CFTR) under control of the human cytomegalovirus promoter/enhancer during cationic amphiphile-mediated gene transfer. Addnl., targeting of organs for gene therapy by i.v. administration of therapeutic compns. is described. Syntheses are described for N4-spermine cholesteryl carbamate, N4-(N'-cholesteryl carbamate glycineamide)-spermine, N4-spermidine-2,3-dilauryloxypropylamine, and N4-spermine-2,3-dilauryloxypropylamine.

MSTR 1A



G9 = 111



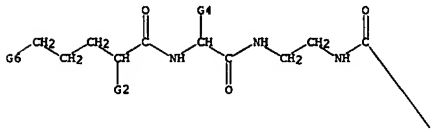
MPL: claim 1

L10 ANSWER 37 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 124:309546 MARPAT
TITLE: Cationic lipids were prepared by ammonolysis and coupling reactions and cationic lipid-nucleic acid mixtures for nucleic acid delivery in cell transfection
INVENTOR(S): Lin, Kuei-Ying; Lewis, Jason G.; Matteucci, Mark D.; Wagner, Richard W.
PATENT ASSIGNEE(S): Gilead Sciences, Inc., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

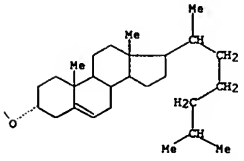
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9601840	A1	19960125	WO 1995-US8555	19950707
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5777153	A	19980707	US 1994-273045	19940708
PRIORITY APPLN. INFO.:			US 1994-273045	19940708

AB The present invention is directed to new cationic lipids and intermediates in their synthesis that are useful for transfection of prokaryotic or eukaryotic cells with nucleic acids or peptides. The lipids comprise one or two arginine, lysine or ornithine residues linked to a lipophilic moiety. The lipids form a compn. when mixed with polyanions such as nucleic acids. The compns. permit efficient transfer of polyanions into cells without significant toxicity to the cells.

MSTR 2



L10 ANSWER 37 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



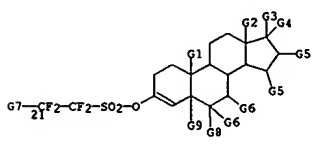
DER: or salts or solvates
MPL: claim 1

L10 ANSWER 38 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 124:232889 MARPAT
TITLE: Preparation of steroidal enol polyfluorohydrocarbyl sulfonate compounds as intermediates for steroidal drugs
INVENTOR(S): Tian, Weisheng
PATENT ASSIGNEE(S): Shanghai Organic Chemistry Inst., Chinese Academy of Sciences, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 18 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1107478	A	19950830	CN 1994-113929	19941008
CN 1055930	B	20000830		
PRIORITY APPLN. INFO.:			CN 1994-113929	19941008

AB The title compds. [I; there may be unsatn. in ring A or B; R1 = H, Me, etc.; R2 = H, Me, Et; R3 = (un)substituted carbamoyl, acetyl, 1-hydroxyethyl, etc.; R4 = H, Et, 1-propynyl, 2-propynyl, CF3; R5, R6 = H, F, Cl, OH, Me, CF2Cl, CF3, or R5R6 = O or CH2; Y = X(CF2CF2O)n, CF3(CF2)m; X = F, Cl, Br, iodo, H; n = 0, 1, 2; m = 0-5] are prepd. Thus, 17.beta.-(tert-butylcarbamoyl)androst-4-en-3-one was treated with CHF2CF2OCF2CF2SO2F in toluene contg. DBU at 80-90.degree. for 6 h followed by silica gel chromatog. to give the title compd. II.

MSTR 1



MPL: claim 1

L10 ANSWER 39 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 124:192411 MARPAT
TITLE: Bile acid conjugates, derivatives thereof with metal complexes and related uses
INVENTOR(S): Anelli, Pier Lucio; De Haen, Christoph; Lattuada, Luciano; Morosini, Pierfrancesco; Uggeri, Fulvio
PATENT ASSIGNEE(S): Bracco S.P.A., Italy; Dibra S.P.A.
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

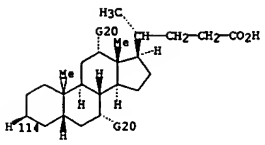
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9532741	A1	19951207	WO 1995-EP1958	19950523
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MX, NO, NZ, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TT, UA, US, UZ				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9525664	A1	19951221	AU 1995-25664	19950523
EP 760683	A1	19970312	EP 1995-920075	19950523
EP 760683	B1	20000105		
R: DE, FR, GB, IT				
JP 10501528	T2	19980210	JP 1995-500267	19950523
NO 9604967	A	19970123	NO 1996-4967	19961122
PRIORITY APPLN. INFO.:			IT 1994-MI1074	19940526
			WO 1995-EP1958	19950523

AB The invention relates to novel paramagnetic metal ion chelates and their use as contrast agents in the diagnostic technique known as magnetic resonance imaging (M.R.I.). In particular, the prepn. of gadolinium complexes of cholic acid diethylenetriaminopentaacetatic acid or 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetatic acid deriv. conjugates with meglumine is described.

MSTR 1A

G21 = 114

L10 ANSWER 39 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



DER: or complex chelates with such metals as G19, and salts
MPL: claim 1

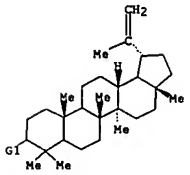
L10 ANSWER 40 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 124:185584 MARPAT
TITLE: A pharmaceutical composition containing .beta.-lupeol derivatives for the prevention and/or treatment of viral infections and optionally inflammations
INVENTOR(S): Berg, Kurt; Christensen, Soeren Broegger; Boye-Knudsen, Carsten; Ming, Chen; Simonsen, Beth
PATENT ASSIGNEE(S): Den.
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9535103	A1	19951228	WO 1995-DK256	19950620
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2193396	AA	19951228	CA 1995-2193396	19950620
AU 9527340	A1	19960115	AU 1995-27340	19950620
AU 689603	B2	19980402		
EP 762876	A1	19970319	EP 1995-922445	19950620
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CN 1158566	A	19970903	CN 1995-194431	19950620
JP 10504279	T2	19980428	JP 1995-501510	19950620
FI 9605114	A	19961219	FI 1996-5114	19961219
NO 9605468	A	19970219	NO 1996-5468	19961219
PRIORITY APPLN. INFO.:			DK 1994-722	19940620
			DK 1994-926	19940809
			WO 1995-DK256	19950620

AB A pharmaceutical compn. for the prevention and/or treatment of viral infections and optionally inflammations comprises one or more .beta.-lupeol derivs., optionally in combination with an ammonium ion-releasing compd., and/or in combination with one or more mono or polysulfated mono, oligo or polysaccharides or analogs and/or derivs. thereof. The pharmaceutical compn. may be in the form of chewing gums, lozenges, chewing tablets, resoriblets, drops, trouches, gels, mouth ointments, solns., mucoadhesive formulations or depot prepns.

MSTR 1

L10 ANSWER 40 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



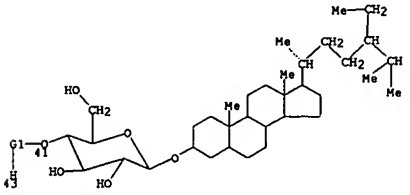
MPL: claim 1

L10 ANSWER 41 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 123:122721 MARPAT
TITLE: hair tonics and growth stimulants containing stigmastanol glycosides
INVENTOR(S): Suzuki, Masami; Kanamaru, Akiko; Yamamoto, Takuya
PATENT ASSIGNEE(S): Pola Kasei Kogyo Kk, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07109294	A2	19950425	JP 1993-253462	19931008
JP 3034411	B2	20000417		

PRIORITY APPLN. INFO.: JP 1993-253462 19931008
AB Hair tonics and growth stimulants contain stigmastanol glycosides (I) [n = 2-5]. A hair tonic contained stigmastanol maltoside 3.0, propylene glycol 5.0, vitamin B2 0.5, yeast ext. (contg. nucleic acid) 0.5, di-K glycyrrhetin 0.3, diphenhydramine-HCl 0.3, methylparaben 0.2, menthol 0.2, ethanol 50.0, vitamin E 0.05, and purified water 39.85 parts. The prepns. were safe and effective.

MSTR 1



MPL: claim 1

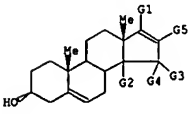
L10 ANSWER 42 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 123:112515 MARPAT
TITLE: Synthesis of 17-(3-pyridyl) steroids
INVENTOR(S): Potter, Gerard Andrew; Hardcastle, Ian Robert
PATENT ASSIGNEE(S): British Technology Group Ltd., UK
SOURCE: Brit. UK Pat. Appl., 17 pp.
CODEN: BAXXDU
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2282377	A1	19950405	GB 1994-19139	19940922
GB 2282377	B2	19970903		
CA 2170286	AA	19950406	CA 1994-2170286	19940922
WO 9509178	A1	19950406	WO 1994-GB2054	19940922
W: AU, CA, JP, NZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9476618	A1	19950418	AU 1994-76618	19940922
AU 676088	B2	19970227		
EP 721461	A1	19960717	EP 1994-927003	19940922
EP 721461	B1	19990203		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09502994	T2	19970325	JP 1995-510163	19940922
AT 176481	E	19990215	AT 1994-927003	19940922
ES 2127413	T3	19990416	ES 1994-927003	19940922
US 5604213	A	19970218	US 1994-315882	19940930
US 5618807	A	19970408	US 1995-392178	19950222

PRIORITY APPLN. INFO.: GB 1993-20132 19930930
GB 1994-14192 19940714
GB 1992-7057 19920331
GB 1992-24880 19921127
WO 1994-GB2054 19940922
US 1994-315882 19940930
OTHER SOURCE(S): CASREACT 123:112515
AB 17-(3-Pyridinyl)-substituted steroids are prepd. by subjecting a 17-iodo or -bromo steroid to a palladium complex-catalyzed cross-coupling reaction with a (3-pyridyl)-substituted borane in a proportion of at least 1.0 equiv. of borane per equiv. of steroid, in an org. solvent, and optionally esterifying the resulting 3.beta.-hydroxy steroid. Thus, dehydroepiandrosterone was converted to its hydrazone and then to its iodide. The latter compd. was treated with 1.1 equiv. diethyl(3-pyridyl)borane and then acetylated to give 3.beta.-acetoxy-17-(3-pyridyl)androsta-5,16-diene.

MSTR 1

L10 ANSWER 42 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



MPL: claim 3

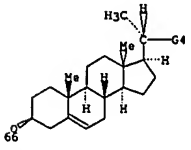
L10 ANSWER 43 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 123:56397 MARPAT
TITLE: Preparation of sterin esters via esterification with succinic anhydride derivatives
INVENTOR(S): Mizushima, Yosen; Maeda, Toshiji
PATENT ASSIGNEE(S): Kao Corp, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07109291	A2	19950425	JP 1993-251616	19931007
JP 3188069	B2	20010716		

PRIORITY APPLN. INFO.: JP 1993-251616 19931007
OTHER SOURCE(S): CASREACT 123:56397
AB Title compds. are prepd. via reaction of alkyl- or alkenylsuccinic anhydrides with sterins and contacting the product with either an inert gas or steam. Thus, 2-hexadecenylsuccinic anhydride was heated with cholesterol at 100.degree. for 1 h and then at 130.degree. for 2 h, the reaction mixt. was cooled to 100.degree., and the product was contacted with steam at 20 g/h for 5 h to give 2-hexadecenylsuccinic acid monoester with cholesterol of good quality.

MSTR 2

G3 = 66



MPL: claim 1

L10 ANSWER 44 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 122:277639 MARPAT
TITLE: Fullerene derivatives, methods for preparing them, and their use
INVENTOR(S): Bingel, Carsten
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

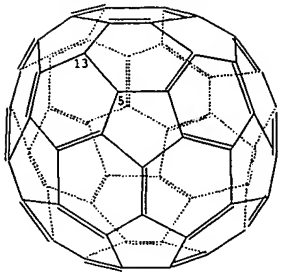
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4313481	A1	19941027	DE 1993-4313481	19930424
WO 9425424	A1	19941110	WO 1994-EP1079	19940407
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2161246	AA	19941110	CA 1994-2161246	19940407
EP 695287	A1	19960207	EP 1994-913120	19940407
EP 695287	B1	19971029		
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 08509232	T2	19961001	JP 1994-523806	19940407
US 5739376	A	19980414	US 1995-535163	19951020
PRIORITY APPLN. INFO.:			DE 1993-4313481	19930424
			WO 1994-EP1079	19940407

AB The title derivs. are described by the general formula I (F = a C20+2m fullerene; E1 and E2 = the same or different groups selected from COOR, CONRR1, CHO, COR, CN, P(O)(OR)2, and SO2R, different (from each other) RCO, R, or H, or different NO2, R3, or H groups; R and R1 = a singly or multiply substituted C1-20 aliph. residue in which up to 3 CH2 units may be replaced by O or NR4; R3 = a singly or multiply substituted C1-20 aliph. residue; R4 = a C1-20 alkyl group, a benzyl group, or a benzyl or Ph group which can optionally be substituted with 1-5 substituents selected from from R, OH, OR, COOR, OOCR, SO3H, SO2Cl, F, Cl, Br, and CN; n = a natural no. ranging from 1 to 10 + m; and m = 20, 25, 28, or 29); their prepn. entails reacting a C20+2m fullerene with a reactant described by the general formula II (X = -Cl, -Br, -I, -OSO2Ar, -OSO2CF3, -OSO2C4F9; and Ar = a Ph group) in the presence of a base selected from and alkali metal hydride, alkali metal hydroxides, alcoholates, amides, amines, or guanidine in an aprotic solvent at a temp. in the range -78 to 180.degree.. Use of the fullerenes in optoelectronic devices is indicated.

MSTR 1

G1 = 13-1 5-3

L10 ANSWER 44 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)



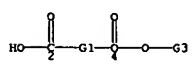
HPL: claim 1
NTE: substitution is restricted
NTE: Ak in G2 and G4 may contain further interruptions

L10 ANSWER 45 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 122:248034 MARPAT
TITLE: Water-in-oil cosmetic emulsions containing amides and sterol dicarboxylic acid monoesters
INVENTOR(S): Takahashi, Akihiko; Koba, Junsuke; Fukazawa, Junichi
PATENT ASSIGNEE(S): Kao Corp, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

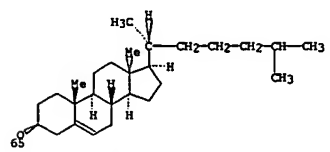
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07010731	A2	19950113	JP 1993-157338	19930628
JP 3271828	B2	20020408		
PRIORITY APPLN. INFO.:			JP 1993-157338	19930628

AB Water-in-oil cosmetic emulsions contain (A) R1OCH2CH(OH)CH2N(XOH)COR2 [I; R1 = C10-26 linear or branched hydrocarbyl; R2 = C9-25 linear or branched hydrocarbyl; X = (CH2)n, {(CH2)2]n(CH2)2, CH2CH(OH)CH2; n = 2-6], (B) HO2CR3CO2R5 (R3 = (CH2)p (p = 2-10), CH2CHR4, CHR4CH2; R4 = C6-20 linear or branched alkyl, alkenyl; R5 = residue of natural sterol or its hydrogenation product from which H of the OH group is removed], (C) 10-70 wt.% oily substances, and (D) 10-88 wt.% H2O [A/B = 0.01-10 (by wt.)] and do not practically contain hydrophilic surfactants. The emulsions are stable and show skin-moisturizing effect. Cholesterol was stirred with n-hexadecenylsuccinic anhydride at 160.degree. for 10 min and stirred at 130.degree. for 1 h to give 89.2% n-hexadecenylsuccinic acid cholesteryl monoester (II). Cosmetic cream contg. Sphingolipid E [I (R1 = n-C16H33, R2 = n-C15H31, X = C2H4)] 5.0, II 15.0, squalane 9.0, olive oil 3.0, jojoba oil 1.0, iso-Pr palmitate 5.0, butylparaben 0.1, methylparaben 0.3, and H2O to 100 wt.% was formulated.

MSTR 2



G3 = 65



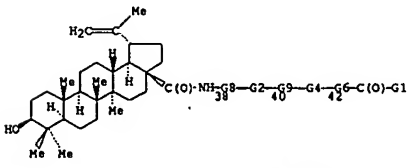
MPL: claim 1

L10 ANSWER 46 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 122:214296 MARPAT
TITLE: Preparation of antiviral lupane derivatives and pharmaceutical formulations containing them
INVENTOR(S): Dereu, Norbert; Evers, Michel; Poujade, Christele; Soler, Francoise
PATENT ASSIGNEE(S): Rhone-Poulenc Rorer S.A., Fr.
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9426695	A1	19941124	WO 1994-FR532	19940506
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FR 2705094	A1	19941118	FR 1993-5619	19930511
FR 2705094	B1	19950804		
CA 2162702	AA	19941124	CA 1994-2162702	19940506
AU 9467879	A1	19941212	AU 1994-67879	19940506
EP 698008	A1	19960228	EP 1994-916260	19940506
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 08509968	T2	19961022	JP 1994-525050	19940506
ZA 9403201	A	19950116	ZA 1994-3201	19940509
PRIORITY APPLN. INFO.:			FR 1993-5619	19930511
			WO 1994-FR532	19940506

AB The title compds. [I; R = (CH2)nX(CH2)mY(CR1R2)pCO2R3; R1, R2, R3 = H, alkyl; X = carbamoyl, N-methylcarbamoyl, aminocarbonyl, N-methylaminocarbonyl; Y = (un)substituted phenylene; m, p = 0-2; n = 6-12; such that m + n + p = 6-12] [e.g., N'-[N-(3.beta.-hydroxy-20(29)-lupen-28-oyl)-8-aminooctanoyl]-3-amino-6-chlorobenzoic acid], useful as antiviral agents against HIV (no data) and the herpes family of viruses (no data), are prepd. and a I-contg. formulation presented.

MSTR 1



DER: and pharmaceutically acceptable salts
MPL: claim 1
NTE: substitution is restricted
STE: and stereoisomers

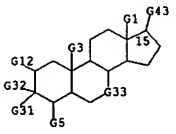
L10 ANSWER 46 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

L10 ANSWER 47 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 120:107475 MARPAT
TITLE: preparation of 4-alkenylsterols and analogs as anticholesteremics
INVENTOR(S): Archer, Robert Allen; Beavers, Lisa Selsam; Gadski, Robert Alan; Lin, Ho Shen; McClure, Don B.; McCowan, Jefferson Ray; Pawlak, Joseph Matthew; Rampersaud, Ashraff Ali; Schmidt, Robert John; et al.
PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA
SOURCE: Eur. Pat. Appl., 121 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 562849	A2	19930929	EP 1993-302261	19930324
EP 562849	A3	19940216		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
NO 9301117	A	19930928	NO 1993-1117	19930325
CA 2092766	AA	19930904	CA 1993-2092766	19930326
AU 9335514	A1	19930930	AU 1993-35514	19930326
HU 64082	A2	19931129	HU 1993-901	19930326
CN 1081682	A	19940209	CN 1993-105203	19930326
JP 06056670	A2	19940301	JP 1993-67968	19930326
ZA 9302178	A	19940926	ZA 1993-2178	19930326
BR 9301342	A	19931005	BR 1993-1342	19930329
PRIORITY APPLN. INFO.:			US 1992-858908	19920327
			US 1993-18985	19930303

AB Title compds. [I; R = OH, acyloxy, NH2, AcNH, etc.; R1 = (halo)alkyl; R2 = H, (halo)methyl; R3 = H, (halo)alkyl, CH2CR6:CR7R8; R4 = H, CH2Ph, (CH2)nX4; R5 = AZZ1X3; A, Z = bond, O, CHMe, CMe(OH), etc.; R6 = H, halo, (halo)alk(en)yl; R7, R8 = H, halo, (halo)methyl; R6R7 = atoms to complete a ring; X = O, H2, H and OH, H and halo, etc.; X3 = H, Ph, OPh, halo, haloalkyl, OH, etc.; X4 = H, OH, (halo) alkyl, (halo)alkoxy, etc.; Z1 = (substituted) alk(en)ylene; n = 1-16; dashed lines = optional position of optional addnl. bond] were prepd. as upregulators of LDL receptor gene expression. Thus, (+)-4-cholesten-3-one was condensed with BrCH2CH:CH2 and the product reduced to give title compd. II which reduced plasma cholesterol levels from 252 to 205 mg/dL in hypercholesteremic African green monkeys receiving 50 mg/kg/day in diet.

MSTR 1A



L10 ANSWER 47 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

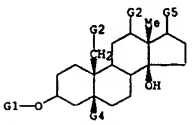
G33 = C(O)
DER: or pharmaceutically acceptable salts
MPL: claim 1
NTE: additional ring formation possible

L10 ANSWER 48 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 119:271614 MARPAT
TITLE: Preparation of N-oxides of pyridazinylsteroid glycosides as cardiovascular agents
INVENTOR(S): Bertolini, Giorgio; Casagrande, Cesare; Norcini, Gabriele; Santangelo, Francesco
PATENT ASSIGNEE(S): Zambon Group S.p.A., Italy
SOURCE: Eur. Pat. Appl., 6 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 551953	A2	19930721	EP 1993-200087	19930114
EP 551953	A3	19940629		
EP 551953	B1	19960605		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AT 138932	E	19960615	AT 1993-200087	19930114
ES 2088627	T3	19960816	ES 1993-200087	19930114
PRIORITY APPLN. INFO.:			IT 1992-MI75	19920116

AB Title compds. [I; R = a glycidic group (sic); R1, R2 = H, OR5; R3 = H, OH; R4 = 4-pyridazyl-1- or 2-N-oxide; R5 = H, HCO, Ac, EtCO, PrCO] were prepd. Thus, 3.beta.-(.alpha.-L-tevetopyranosyloxy)-14-hydroxy-17.beta.-(4-pyridazinyl-2-N-oxide)-5.beta.,14.beta.-androstane, prepd. by 3-ClC6H4CO2OH oxidn. of the corresponding pyridazinylsteroid glycoside, had Ki of .gtoreq.100.0 and 0.08 mM for binding at .alpha.1 and .alpha.3 isoforms of rat (Na+ + K+)-ATPase, resp.

MSTR 1



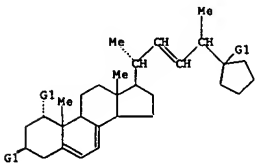
MPL: claim 1

L10 ANSWER 49 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 119:226242 MARPAT
TITLE: Preparation of 26,27-dimethylene-1.alpha.,25-dihydroxyvitamin D2 for treatment of bone disease
INVENTOR(S): DeLuca, hector Floyd; Nakagawa, Naoshi
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA
SOURCE: Eur. Pat. Appl., 15 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 549318	A2	19930630	EP 1992-311681	19921222
EP 549318	A3	19931006		
EP 549318	B1	19961016		
R: AT, BE, CH, DE, DK, ES, FR, IT, LI, NL, SE				
AU 9230362	A1	19930701	AU 1992-30362	19921222
AU 656829	B2	19950216		
AT 144250	E	19961115	AT 1992-311681	19921222
JP 05271183	A2	19931019	JP 1992-358790	19921228
JP 3195452	B2	20010806		
US 5397775	A	19950314	US 1993-70500	19930602
US 5478955	A	19951226	US 1994-337110	19941110
US 5494906	A	19960227	US 1995-435649	19950505
PRIORITY APPLN. INFO.:			US 1991-813852	19911226
			US 1993-70500	19930602
			US 1994-337110	19941110

AB Title compds. (I; R1 = H, R2 = Me, or vice versa), were prepd. Thus, hydroxybutanoate II was converted in several steps to sulfone III (TES = Et3Si). This in THF was treated with LiNEt2 at -50 to -60.degree.; the mixt. was cooled to -78.degree. and treated with (20S)-1.alpha.,3.beta.-bis(methoxycarbonyloxy)-20-methylpregna-5,7-dien-21-al to give a residue which was treated with Ac2O/DMAP to give another residue which was treated with Na/Hg and NaHCO3 in MeOH/THF to give 65.2% triene deriv. This was converted to title compd. I (R1 = Me, R2 = H) in several steps. I have reduced bone calcium mobilization activity relative to 1,25-dihydroxyvitamin D3, and are at least as active in cell differentiation and receptor binding activities.

MSTR 1



L10 ANSWER 49 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MPL: claim 4

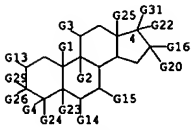
L10 ANSWER 50 OF 50 MARPAT COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 119:160646 MARPAT
TITLE: Preparation and formulation of angiostatic steroids
INVENTOR(S): Clark, Abbot F.; Conrow, Raymond E.
PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9310141	A2	19930527	WO 1992-US10133	19921123
WO 9310141	A3	19930902		
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
US 5371078	A	19941206	US 1992-941485	19920908
AU 9332235	A1	19930615	AU 1993-32235	19921123
AU 678961	B2	19970619		
EP 614463	A1	19940914	EP 1993-900609	19921123
EP 614463	B1	20030212		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
JP 07501081	T2	19950202	JP 1993-509563	19921123
JP 3378245	B2	20030217		
AT 232540	E	20030215	AT 1993-900609	19921123
US 5679666	A	19971021	US 1994-342524	19941121
US 5770592	A	19980623	US 1997-895184	19970716
WO 9903503	A1	19990128	WO 1998-US12711	19980618
W: AU, BR, CA, JP, MX, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9881515	A1	19990210	AU 1998-81515	19980618
AU 734195	B2	20010607		
EP 1003553	A1	20000531	EP 1998-931367	19980618
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9811012	A	20001017	BR 1998-11012	19980618
JP 2001510170	T2	20010731	JP 2000-502798	19980618
MX 9911140	A	20000430	MX 1999-11140	19991202
US 6297228	B1	20011002	US 1999-445237	19991202
PRIORITY APPLN. INFO.:			US 1991-796169	19911122
			US 1992-892448	19920602
			US 1992-941485	19920908
			US 1988-264918	19881031
			US 1989-419226	19891010
			US 1990-559123	19900727
			WO 1992-US10133	19921123
			US 1994-342524	19941121
			US 1997-895184	19970716
			WO 1998-US12711	19980618

AB Title compds. [I and II; R1 = H, .beta.-Me, .beta.-Et, R2 = H, F, Cl; R3 = H, alkoxy, alkanoyloxy, halo, O2CNH2, etc.; R2R3 = bond, O; R5 = H, OH, halo, Me, Ph, vinyl, alkyl, R6 = H, Me; R9 = H, OH, Me, F, 2-(alkoxy)ethyl, 2-(alkanoyloxy)ethyl, etc.; R10 = H, C.tplbond.CH, vinyl, halo, OH, Me, etc.; R12 = H; R1R12 = bond; R13 = H, OH, alkoxy, NH2, etc.; R14 = H; R12R14 = bond; R25 = OH, alkoxy, alkanoyloxy, CO2H, CH2OH, etc.; Z = CHR4, etc.; R4 = H, Me, Cl, F] were prepd. Thus, tetrahydrocortisol-F was converted in 3 steps to 5.beta.-pregnan-11.beta.,17.alpha.,21-triol-2-one. 4,9(11)-Pregnadiene-17.alpha.,21-diol-3,20-dione gave complete inhibition of lipopolysaccharide-induced corneal neovascularization in rabbit eye at 50 .mu.g in a pellet implant.

L10 ANSWER 50 OF 50 MARPAT COPYRIGHT 2003 ACS on STN (Continued)

MSTR 1



MPL: claim 1
NTE: substitution is restricted
NTE: additional steroid derivatives allowed

```
=> d his

     (FILE 'HOME' ENTERED AT 10:49:06 ON 12 NOV 2003)

     FILE 'REGISTRY' ENTERED AT 10:49:10 ON 12 NOV 2003
L1              STRUCTURE UPLOADED
L2           50 S L1
L3         2415 S L1 FULL
L4              STRUCTURE UPLOADED
L5          640 S L4 FULL SUB=L3

     FILE 'CAPLUS' ENTERED AT 10:52:45 ON 12 NOV 2003
L6          147 S L5
L7            1 S L6 NOT PY>=1992
L8            1 S L6 NOT PY>=1991

     FILE 'MARPAT' ENTERED AT 10:54:53 ON 12 NOV 2003
L9           50 S L5
L10          50 S L9 NOT PY>=1991

     FILE 'BEILSTEIN' ENTERED AT 11:02:51 ON 12 NOV 2003
L11         622 S L1 FULL

     FILE 'USPATFULL' ENTERED AT 11:03:41 ON 12 NOV 2003
L12          49 S L5
L13           0 S L12 NOT PY>=1991
```

=> d ibib ab hitstr